BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognised under 2(f) and 12 (B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli)
THANJAVUR – 613 005.
PG & RESEARCH DEPARTMENT OF COMMERCE
COURSE OUTCOMES
B.COM

PO1	Provide on exposure to understand the basic principles of accounts and its implications in business and to know the importance of costing and to understand the basic concepts.
PO2	Provide a basis of understanding to the students with reference to working of business organisation through the concepts of management and application of practice in various organisations.
PO3	Acquire the knowledge on business law and company law the practice of auditing and to understand the process of banking activities.
PO4	Develop various knowledge in marketing and business skill, general and leadership capability by means of recent tools to accomplish solutions for industry requirements
PO5	Emerge well - trained professionals in the field of commerce.

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COURSE OUTCOMES
B.COM

COURSE NAME: PRINCIPLES OF ACCOUNTANCY		COURSE CODE: 16CCCCM1
CO1	Accounting concept and convictions double entry system journal ledger subsidiary book Trial balance Bank Reconciliation Statement.	
CO2	Final accounts Rectification Errors.	
CO3	Account of non-profit organization - Bill of exchange Average due date.	
CO4	Consignments and Joint ventures.	
CO5	Single entry system Depreciation methods, provisions and reserves.	
COURSE NAME: MARKETING		COURSE CODE: 16CCCCM2
CO1	Market-Classification of Market, Modern Marketing Concept, Buying, Selling, Transportation, Warehousing, Standardisation, Grading, Packaging, ISO, ISI, AGMARK.	
CO2	Buyers Behaviour, Product-product life cycle, Branding.	
CO3	Pricing, Methods of pricing, Channels of Distribution.	
CO4	Sales Promotion- Types, Advertising, Publicity, Personal Selling.	
CO5	Marketing Information System, Marketing Research, E Business.	
COURSE NAME: BUSINESS MANAGEMENT		COURSE CODE: 16CACCM1A
CO1	Management definition, nature, scope, functions and levels of management- contribution by F.W Taylor, Hendry Fayol and others.	
CO2	Planning, classification, objectives, characteristics advantages, decision making policies.	
CO3	Organization and structure, types, supervision and span of control, departmentation, authorities and responsibilities, delegation and decentralisation.	
CO4	Motivation types theories Maslow's Herzberg Mc Gregor and others communication principles types and barriers of communication.	
CO5	Leadership functions styles theories coordination features types and techniques control process effective control system techniques of control.	
COURSE NAME: BUSINESS ACCOUNTING		COURSE CODE: 16CCCCM3
CO1	Branch Account, Departmental account.	
CO2	Hire purchase account and instalment purchase system.	
CO3	Self balancing and sectional balancing ledger, Royalty accounts.	
CO4	Fire insure claim, Accounting for sale or return.	
CO5	Insolvency accounts, Statement of affairs.	

COURSE NAME: BANKING THEORY LAW AND PRACTICE		COURSE CODE: 16CCCCM4
CO1	Definition of the term Banker and Customer General relationship and special relationship, functions and service.	
CO2	Operation of the bank accounts, Fixed deposit Saving Bank account, Current account Recurring deposit account, Annuity deposit account.	
CO3	Types of customer, Minor, Illiterate person, married women, Lunatics person, Drunkards, Joint stock companies, Societies, Winding up	
CO4	Paying and collecting banker, Rights responsibilities and duties precautions collection of cheque.	
CO5	Pass Book, Cheque, Types of cheque alteration marking Crossing, ATM Mobile Bank, RTG, NEFT,MICR	
COURSE NAME: BUSINESS ECONOMICS		COURSE CODE: 16CACCM1B
CO1	Business Economics, Definition, Scope and nature Art or Science micro and macro economics relating to business.	
CO2	Demand analysis law of demand - Elasticity of demand- indifference curve analysis-consumer equilibrium.	
CO3	Production function factors of production-Isoquant analysis - scale of production.	
CO4	Supply schedule law of supply, monopoly, duopoly, oligopoly- pricing.	
CO5	National income concept, measurement Inequality of income-Fiscal policy.	
COURSE NAME: PARTNERSHIP ACCOUNTS		COURSE CODE: 16CCCCM5
CO1	Partnership, meaning Deed Capital account distribution of profit interest on capital and drawings salary and commission of partner.	
CO2	Admission of partner profit sharing ratio revaluation of assets and liabilities treatment of goodwill.	
CO3	Retirement of partner gaining ratio Calculation of profit up to death of partner's capital and balance sheet.	
CO4	Dissolution of partnership firm insolvency of partners Garner vs Murray insolvency of all partners.	
CO5	Amalgation of firm conversion of sale partnership firm.	
COURSE NAME: BUSINESS LAW		COURSE CODE: 16CCCCM6
CO1	Scope of mercantile law, kinds of contract, legality of object.	
CO2	Performance of contract, Discharge of contract, Quasi Contract.	
CO3	Guarantee, Pledge, Agency.	
CO4	Law of sale of goods, Buyer goods delivery condition and warranty.	
CO5	Law of negotiable instruments, Bills, Cheque and Promissory note.	

COURSE NAME: BUSINESS COMMUNICATION		COURSE CODE: 16CACCM1C
CO1	Communication , kinds of Business Letters, Layout and Barriers to communication	
CO2	Enquiry and Replay, order and their Execution Credit and Status enquiry Claim and adjustment.	
CO3	Collection letter Sales letter, circular letter, Bank correspondence, correspondence of a company Secretary.	
CO4	Application letter types and guidelines to write application letter and Resumes, report writing types of report presentation of report.	
CO5	Modern communication methods.	
COURSE NAME: COST ACCOUNTING		COURSE CODE: 16CCCCM7
CO1	Definition, Scope and nature of cost accounting, classification objectives and advantages demerits methods, and cost unit cost centre cost sheet.	
CO2	Material cost, purchase procedure EOQ process FIFO, LIFO simple average weighted average.	
CO3	Labour cost method of remuneration and incentives over time.	
CO4	Overheads collection classification allocation appointment cost sheet.	
CO5	Job costing contract costing process costing operating costing.	
COURSE NAME: COMPANY LAW		COURSE CODE: 16CACCM1D
CO1	Definition of Joint Stock Company – Kinds – Formation – Incorporation.	
CO2	MOA – Doctrine of Ultra Vires – AOA – Prospects – Statement in Lieu Prospects.	
CO3	Share Capital – Kinds of Shares – Voting Rights – Borrowing Powers of Company.	
CO4	Meeting and Resolution – Statutory meeting – Annual General Meeting.	
CO5	Winding Up of a Company – Modes of Winding Up.	
COURSE NAME: CORPORATE ACCOUNTING		COURSE CODE: 16CCCCM9
CO1	Company accounts legal provisions regarding issue of shares, application, allotment, calls, calls in arrears issue of shares at premium, discount, forfeiture of shares.	
CO2	Issue and redemption of debentures, methods of redemption of debentures, insurance policy, types of shares.	
CO3	Amalgamation, purchase consideration, absorption, external and internal reconstruction of companies.	
CO4	Holding companies legal requirements relating to presentation of accounts.	
CO5	Final accounts of banking companies and insurance companies.	

COURSE NAME: AUDITING		COURSE CODE: 16CCCCM10
CO1	Audit, classification of audit, interim audit, procedure of audit, Audit programme-Auditing vs. investigation.	
CO2	Vouching-cash and Trading transactions, personal and impersonal ledger	
CO3	Valuation and verification of assets and liabilities, depreciation and reserves.	
CO4	Audit of limited companies- share capital, share transfer audit, rights and liabilities of company Auditors- Audit report.	
CO5	Divisible profit and dividend - Audit of computerised Auditing.	
COURSE NAME: MANAGEMENT ACCOUNTING		COURSE CODE: 16CCCCM12
CO1	Management accounting financial statement analysis comparative and common size statement trend percentage ratio analysis.	
CO2	Fund flow statement, schedule of changes in working capital fund from operation Cash flow statement.	
CO3	Budget and Budgetary control preparation of various types of Budget.	
CO4	Variance of analysis material and labour variance marginal costing, margin of safety BEP.	
CO5	Capital budgeting payback period net present value, profitability of index and internal rate of return.	
COURSE NAME: ENTREPRENEURIAL DEVELOPMENT		COURSE CODE: 16MBECM1
CO1	Entrepreneurship concept characteristics, functions, types - development of women and rural entrepreneurs.	
CO2	Start up process, project identification, selection of project, project formulation - Feasibility analysis- Project report.	
CO3	Institution in the development of Entrepreneurs: DIC, SIDO, NSIC, SSIC, SIDCO, ITCOT, IIC, KVIC.	
CO4	Institutional finance to Entrepreneurs: IFCI, SFC, TIIC, LIC, GIC, SIPOCT, SIDBI Commercial Banks and Venture capital.	
CO5	Incentives and subsidies Seed capital assistance-Taxation benefits to SSI.	
COURSE NAME: FINANCIAL MANAGEMENT		COURSE CODE: 16CCCCM13
CO1	Financial management- profit maximization, wealth maximization- financial decision time value of money cost of equity cost of retain earrings, weighted average cost of capital.	
CO2	Capital structure - factor determining capital structure EBIT, EPS, EPIT net operating income approach, MM approach and Traditional approach.	
CO3	Leverage operating leverage and financial leverage, Combined leverage dividend policy.	
CO4	Working capital management forecasting of working capital requirement, cash management, Boumul model investment of surplus cash.	
CO5	Receivable management factors influencing size of receivable credit policy- EOQ, ABC, VED, FSN and HML analysis.	

COURSE NAME: INCOME TAX THEORY LAW AND PRATICE		COURSE CODE: 16CCCC14
CO1	Basic concept assessment year total income casual income capital and revenue residential status.	
CO2	Salary basis of charge different forms salary allowances perquisites and their valuation computation of taxable salary.	
CO3	House property determination of annual value GAV, NAV - income from let-out property.	
CO4	Capital gain indexed cost acquisition and improvement- computation of taxable capital gain income from other sources deduction under section 80C.	
CO5	capital gain indexed cost acquisition and improvement- computation of taxable capital gain income from other sources deduction under section	
COURSE NAME: FINANCIAL SERVICES		COURSE CODE: 16CCCC15
CO1	Financial services classification Merchant Banking- functions SEBI Guidelines NBFCs-RBI Guidelines.	
CO2	Hire purchase -hire purchase vs. instalment purchase - leasing concept- steps involved in leasing- lease vs. hire purchase types of lease.	
CO3	Mutual fund type's functions institution involved - UTI, LIC, Commercial Bank SEBI Guidelines AMC.	
CO4	Ventures capital methods, investment process Exit mechanism issues of Indian venture capital industry.	
CO5	Factoring - types Factoring vs bills discounting- Forfeiting vs. export factoring.	
COURSE NAME: HUMAN RESOURCE MANAGEMENT		COURSE CODE: 16MBECM3
CO1	Human resource management function, Human Resource manager advantages and disadvantages.	
CO2	Concept of human resource planning, steps in human resource planning, job analysis, job description and job specification.	
CO3	Factors affecting recruitment and selection type of testing kinds of employees interview medical screening appointment order.	
CO4	Definition and purpose of training and development training needs steps in training on the job training, training effectiveness.	
CO5	Definition and objectives of performance appraisal traditional and non traditional method of performance appraisal defecting performance appraisal.	
COURSE NAME: INVESTMENT MANAGEMENT		COURSE CODE: 16MBECM6
CO1	Investment – Objectives of investment- Sources of investment.	
CO2	Risk – Systematic and unsystematic Risk and Return – Capital and Revenue return.	
CO3	Bank deposit – Post office saving scheme – Gold and Silver – Real estate – Equity share – Mutual fund – Life Insurance.	
CO4	Time value of money – meaning, current money vs future money – Present value interest factor – future value.	
CO5	Primary market vs Secondary market – Fundamentals of analysis – Economic analysis – Industry analysis – Company analysis	

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COURSE OUTCOMES
M.COM

PO1	Impart the knowledge and skills on various advance concepts and its applications in the field of commerce.
PO2	Enable students to procure national as well as international trends in Commerce.
PO3	Enable the students to manage Business, Accounting, Corporate and Financial Sectors.
PO4	Communicate the major concepts in Accounting, Marketing, Finance, Information Technology and Management.
PO5	Impart the necessary skills and aptitude for successful Entrepreneurship.

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COURSE OUTCOMES
M.COM

COURSE NAME: MANAGERIAL ECONOMICS		COURSE CODE: P16MC11
CO1	Managerial economics, Role of managerial economist-demand analysis and forecasting and techniques.	
CO2	Production function, supply analysis-Law of supply Cost concept, Classification cost output and cost control cost reduction.	
CO3	Price and price forecasting output decision under different marketing structure - Perfect competition, Monopoly, Oligopoly and Monopolistic Competition	
CO4	Profit, profit planning profit theory measurement of profit and interest	
CO5	Business cycle and policies economic forecasting of business National income.	
COURSE NAME: SERVICES MARKETING		COURSE CODE: P16MC12
CO1	Services marketing, Definition, importance, characteristics types.	
CO2	Concept of service marketing, Buyer behaviour factors influencing buyer behaviour decision making process.	
CO3	Services marketing mix, Product Strategies, Product life cycle, Product planning, Product development.	
CO4	Bank marketing insurance marketing transport marketing.	
CO5	Tourism and hotel marketing Educational marketing communication service Health service.	
COURSE NAME: CORPORATE LAW		COURSE CODE: P16MC13
CO1	Provision of companies Act 1956 relating to company administration Board of Directors, Managing Directors - Types of meeting latest amendments in Companies Act 2013.	
CO2	Industry development and Regulation Act 1951. Effect of Central Government Order Registration and Licensing management and control, power.	
CO3	Foreign exchange management Act1999, Regulations and management of foreign exchange.	
CO4	Essentials commodities Act1955, definition power effect control, Consumer protection Act 1986.	
CO5	Water prevention and control of pollution Act 1974 Air prevention and control Act 1981.	
COURSE NAME: INCOME TAX THEORY LAW AND PRACTICE		COURSE CODE: P16MC14
CO1	Income tax Act - Definition, Agriculture income, Assessee - previous year assessment year Residential status total income capital and revenue.	
CO2	Computation of income from salary and House property income.	
CO3	Computation of profit and Gain of business or Profession, Computation of income from other sources.	
CO4	Set- off carry forward deduction.	
CO5	Income from tax authority, Tax deducted at source, Hindu undivided family.	

COURSE NAME: RETAIL MANAGEMENT		COURSE CODE: P16MCE1B
CO1	Retail concept traditional and non traditional retail- Information Technology in retail management.	
CO2	Indian retail industry, macro and micro environmental influences Rural retailing.	
CO3	Retail formats types, Choice of location, store image, HRM Information systems.	
CO4	Merchandise management service and product retailing, Mall management.	
CO5	Shopping process personality and life style in retail CRM in retailing.	
COURSE NAME: ADVANCED FINANCIAL MANAGEMENT		COURSE CODE: P16MC21
CO1	Financial management meaning, nature and scope of finance goal profit vs wealth maximisation, finance function.	
CO2	Fundamental valuation concept time value of money compound value, present value portfolio context risk and return, valuation of preference shares equity valuation dividend valuation approach.	
CO3	Cost of capital meaning and significance of cost of capital calculation of cost of debit, preference capital financial leverage, operating and financial leverage.	
CO4	Planning and capital structure, factors influencing capital structure EBIT, EPS, corporate dividend behaviour.	
CO5	Management of working capital types of working capital calculating operating cycle period and estimation of working capital.	
COURSE NAME: HUMAN RESOURCE MANAGEMENT		COURSE CODE: P16MC23
CO1	Human Resource - meaning, nature and scope, objective functions personal policies human resources information, system need and benefits.	
CO2	Manpower planning characteristics need, process job analysis, job evaluation methods, merits Recruitment source, selection procedure placement.	
CO3	Training meaning needs defection of training methods of training management development programme.	
CO4	Performance appraisal, performance techniques quality of work life.	
CO5	Grievances meaning, procedure, level, benefits	
COURSE NAME: ORGANIZATIONAL BEHAVIOUR		COURSE CODE: P16MCE2A
CO1	Organisational behaviour meaning, charteristics disciplines contributing to OB - Hawthorne experiment.	
CO2	Perception process factors influencing perception theories of learning.	
CO3	Theories of Personality – Types -Emotional Intelligence – Features - Formal and Informal Groups – Stress Management.	
CO4	Leadership theory, Motivation theory, communication conflict.	
CO5	Organisation change- process, organisation development and techniques, culture- factors influencing organisational culture.	

COURSE NAME: TOTAL QUALITY MANAGEMENT		COURSE CODE: P16MC31
CO1	Introduction to Quality Control, Cost Consideration Application in Quality Control.	
CO2	Sampling Inspection in Engineering manufacture- Statistical quality control- methods of inspection- quality appraisal.	
CO3	Theory of sampling inspection ABC analysis Diagnosis and prevention.	
CO4	Quality improvement recent technique for quality improvement- Zero defects- Quality motivation techniques.	
CO5	Selection of ISO model and implementation of ISO 9000- Human resource development and quality circle.	
COURSE NAME: ADVANCED CORPORATE ACCOUNTING		COURSE CODE: P16MC32
CO1	Valuation of Goodwill and shares - Liquidation- Inflation Accounting.	
CO2	Amalgamation by merger and Amalgamation by purchase, External reconstruction alteration share capital.	
CO3	Holding Company accounts, Bank account, NPA - Classification of investment.	
CO4	Insurance company accounts - double accounts system.	
CO5	Human resource accounting - definition, objectives and valuation methods advantages- inflation accounting.	
COURSE NAME: RESEARCH METHODOLOGY		COURSE CODE: P16MC33
CO1	Research introduction types of research, case study method Ex post Facto Research.	
CO2	Research design, Experimental Research, Research problem and Formulation of Hypothesis.	
CO3	Research process Data collection Sampling designs - Philosophy and pre-testing.	
CO4	Date presentation and analysis - Data processing and methods Statistical analysis. Interpretation of Data.	
CO5	Report writing, types of report presentation of report Foot note and Bibliography.	
COURSE NAME: STRATEGIC MANAGEMENT		COURSE CODE: P16MC34
CO1	Strategic management scope benefits and risk. Strategic change and decision making.	
CO2	Situation analysis, SWOT analysis, Environment scanning and business ethics.	
CO3	Strategic formulation, business strategy, Corporate strategy and Strategy alliance.	
CO4	Strategy implementation Staffing, Leadership, MBO, TQM and functional strategy.	
CO5	Strategy control and evaluation techniques and Innovation.	

COURSE NAME: EXPORT MARKETING		COURSE CODE: P16MCE3A
CO1	Export marketing introduction meaning objectives scope need and importance internal trade and international trade problems faced by the exporter.	
CO2	Features and functions of export marketing sources of marketing information, product planning, quality control, export pricing, strategy formation.	
CO3	Steps involved in export, confirmation of order production of goods negotiation regulatory documents ISO Certificate.	
CO4	Export policy and promotion EXIM policy regulation of export trade, export houses trading houses.	
CO5	Institution engaged in financing export ECGC, EXIM Bank, EPG, STC, MMTC.	
COURSE NAME: INVESTMENT MANAGEMENT		COURSE CODE: P16MC41
CO1	Investment management, nature and scope objectives securities and non securities forms sources of investment information.	
CO2	New issue market method of issuing parties involved in the new issue market secondary market NSE, BSE, SEBI.	
CO3	Securities analysis fundamental of analysis technical analysis down theory random walk theory.	
CO4	Portfolio analysis traditional and modern approach markovitz theory shart index.	
CO5	Mutual fund investment companies in India UTI, SEBI and RBI Guideline for Mutual fund.	
COURSE NAME: ADVANCED COST AND MANAGEMENT ACCOUNTING		COURSE CODE: P16MC42
CO1	Cost accounting meaning objectives nature and scope methods techniques classification inventory system, inventory control.	
CO2	Labour cost direct and indirect cost remuneration methods labour performance labour turnover overhead cost control.	
CO3	Processing cost normal and abnormal loss and gains contract costing.	
CO4	Management accounting nature and scope tools and techniques ratio analysis marginal costing profit analysis break even analysis.	
CO5	Budget administration types of budget advantages budgetary control material cost labour cost.	
COURSE NAME: PROJECT MANAGEMENT		COURSE CODE: P16MCE5A
CO1	Project-types, project life cycle- scope of project management, role of project manager.	
CO2	Project identification and formation - investment opportunities project selection.	
CO3	Project appraisal, project methodology, market appraisal and management appraisal.	
CO4	Project planning and scheduling, planning components matching availability of manpower and release of funds.	
CO5	Project execution and administration - project direction, communication and coordination, project control.	

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DEPARTMENT OF BUSINESS ADMINISTRATION

ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAMME OUTCOME(BBA)

PO1	**Knowledge of business and management:** Have a broad body of knowledge in business management concepts, current practices in a global business environment and emerging technology to support, and innovate business
PO2	**Problem solving and decision making:** Attain problem solving, decision making and critical thinking skills to provide viable solution for business problems.
PO3	**Intercultural competence/communication:** Appreciate diversity to communicate effectively in international and cross-cultural contract and facilitate collaborative professional partnership.
PO4	**Teamwork:** Have the ability to work and collaborate as a team member and contribute to achieve team goals.
PO5	**Global citizenship/ethics:** Define, explain illustrate the foundation of business ethics, and in preparing for citizenship both local and global.

COURSE NAME : MANAGEMENT CONCEPTS		COURSE CODE:16CCBB1
Upon Completion of the Course Students would be able to		
CO1	Aware of levels of management and F.W.Taylors scientific management.	
CO2	Capable of planning effectively.	
CO3	Enable organizing effectively with proper delegation.	
CO4	Acquired complete knowledge selection process, Recruitment and different kinds of training.	
CO5	With the knowledge of process of control ideal control system con be established.	
COURSE NAME : FINANCIAL ACCOUNTING		COURSE CODE:16CCBB2
Upon Completion of the Course Students would be able to		
CO1	Enabled to distinguish double entry and single-entry systems.	
CO2	Aware of subsidiary books and ledger checking balance by preparing trial balance.	
CO3	Preparation of bank reconciliation statement and final accounts with balance sheet.	
CO4	Acquire clear idea of various methods of depreciation and clearly distinguish capital and revenue items.	
CO5	Have complete knowledge of non-trading organisations accounts.	
COURSE NAME : MANAGERIAL ECONOMICS		COURSE CODE:16ACBB1
Upon Completion of the Course Students would be able to		
CO1	Clearly understand relationship with other disciplines.	
CO2	Aware of utility theory and concept of consumers surplus.	
CO3	Gain the knowledge of economics of large scale production.	
CO4	Price under various competitions.	
CO5	Understand national income, causes for inequalities of income.	

COURSE NAME : MARKETING MANAGEMENT		COURSE CODE:16CCBB3
Upon Completion of the Course Students would be able to		
CO1	Students gain knowledge about the basic concepts of marketing.	
CO2	Understand markets segmentation.	
CO3	Develop skills to pricing of the products.	
CO4	Awareness of marketing channels and avoidance of middlemen.	
CO5	Gain the practical knowledge to sell the goods.	
COURSE NAME : MATHEMATICS AND STATISTICS FOR MANAGERS		COURSE CODE:16CCBB4
Upon Completion of the Course Students would be able to		
CO1	Provide a derivation for mathematical problem.	
CO2	Know where and how to use mathematical procedures.	
CO3	Provide a consider and clear description of a statistical problem.	
CO4	Provide a discussion of the results and of the statistical analysis.	
CO5	Find out relationship between the variables.	
COURSE NAME : BUSINESS ENVIRONMENT		COURSE CODE:16ACBB2
Upon Completion of the Course Students would be able to		
CO1	Develop understanding on the gamut of the business activities.	
CO2	Analyze economic system and planning in privatization.	
CO3	Enable to understand political environment and institutions-legislature and judiciary.	
CO4	Familiarize -financial system and financial institutions both national levels.	
CO5	Acquire knowledge about impact of culture on business and social responsibility of business.	

COURSE NAME : MANAGERIAL COMMUNICATION		COURSE CODE:16CCBB5
Upon Completion of the Course Students would be able to		
CO1	Understand how barriers to communication can overcomes.	
CO2	Familiar to layout and parts of letters, commercial terms and abbreviations.	
CO3	Acquire adequate skills in business correspondence.	
CO4	Equip students to correspond with banks and import and export institutions.	
CO5	Enables students to write reports and speeches on topics related to business.	
COURSE NAME : COMPUTER APPLICATION IN BUSINESS		COURSE CODE:16CCBB6
Upon Completion of the Course Students would be able to		
CO1	Describe the usage of computers and why computers are essential components in business and society.	
CO2	Utilize the Internet Web resources and evaluate on-line e-business system.	
CO3	Solve common business problems using appropriate Information Technology applications and systems.	
CO4	Identify categories of programs, system software and applications. Organize and work with files and folders	
CO5	Describe various types of networks network standards and communication software.	
COURSE NAME : BUSINESS LAW		COURSE CODE:16ACBB3
Upon Completion of the Course Students would be able to		
CO1	Develop and to make the students on the basic principles and legal aspects of business law.	
CO2	Promote the understanding of performance contract.	
CO3	Aware of agency related acts.	
CO4	Enable to empower sale of goods act.	
CO5	Acquired complete knowledge about partnership business and related acts.	

COURSE NAME : ORGANISATIONAL BEHAVIOUR		COURSE CODE:16CCBB7
Upon Completion of the Course Students would be able to		
CO1	Gain basic knowledge on various models organizational behaviour.	
CO2	Develop personality and group behaviour.	
CO3	Gain knowledge about leadership styles and power politics.	
CO4	Enable to know authority and improve morale in an organization.	
CO5	Familiarize concepts of motivation and various theories of motivation and to manage stress.	
COURSE NAME : OPERATIONS RESEARCH		COURSE CODE:16CCBB8
Upon Completion of the Course Students would be able to		
CO1	Make decisions by using operation research.	
CO2	Find out least cost by using transportation method.	
CO3	Solve the problem in maintaining the inventory.	
CO4	Understand variety of problems such as Assignment and travelling salesman etc.	
CO5	Differentiate individual Vs Group replacement.	
COURSE NAME : PRODUCTION MANAGEMENT		COURSE CODE:16ACBB4
Upon Completion of the Course Students would be able to		
CO1	Understand the nature and importance of production management.	
CO2	Exposure to various pants and machinery maintenance.	
CO3	Know the production planning and control.	
CO4	Expertise in quality control and inspection exposure to various certification marks and certificates institution.	
CO5	Enable to take decision in material management.	

COURSE NAME : COST ACCOUNTING		COURSE CODE:16CCBB9
Upon Completion of the Course Students would be able to		
CO1	Understand basic concepts of cost accounting.	
CO2	Acquire knowledge about calculation economic order quality.	
CO3	Aware of labour turnover and measurement.	
CO4	Facilities to calculate various kinds of costing.	
CO5	Apply the costing techniques in different practical situation.	
COURSE NAME : FINANCIAL MANAGEMENT		COURSE CODE:16CCBB10
Upon Completion of the Course Students would be able to		
CO1	Exposure to various concepts and principles of financial management.	
CO2	Understand cost of capital and retained earning.	
CO3	Gain complete knowledge about dividend policies.	
CO4	Develop capital structure planning.	
CO5	Acquaintance with various tools for the management and understanding of finance.	
COURSE NAME : COMPANY LAW AND SECRETERIAL PRACTICES		COURSE CODE:16CCBB11
Upon Completion of the Course Students would be able to		
CO1	Enable to distinguish private LTD company and public LTD company.	
CO2	Understand formation of companies.	
CO3	Gain complete knowledge of shares and dividends.	
CO4	Get enlightened the role of company secretary and the procedures of meetings.	
CO5	Aware of statutory meeting and its requirements.	

COURSE NAME : RESEARCH METHODS IN MANAGEMENT		COURSE CODE:16CCBB12
Upon Completion of the Course Students would be able to		
CO1	Understand basic theoretical ideas and logic of research.	
CO2	Know about various aspects of research problems.	
CO3	Have an idea about hypothesis and sampling.	
CO4	Gain complete knowledge about data and interpretation of data.	
CO5	Through knowledge drafting of reports for various research projects.	
COURSE NAME : SERVICES MARKETING		COURSE CODE:16MBEBB1
Upon Completion of the Course Students would be able to		
CO1	Aware of various concepts services marketing.	
CO2	Understand management process for services develop services marketing mix.	
CO3	Know strategy for managing demand to match capacity.	
CO4	Enable to handle special issues of service pricing.	
CO5	Through knowledge drafting of reports for various research projects.	
COURSE NAME : HUMAN RESOURCES MANAGEMENT		COURSE CODE:16CCBB13
Upon Completion of the Course Students would be able to		
CO1	Understand the basic elements of H.R.M.	
CO2	Gain knowledge of H.R Planning, Selection and placement of personal.	
CO3	Acquire knowledge of training.	
CO4	Aware of different methods of wage payments.	
CO5	Expertise in performance evaluation and grievance handling.	

COURSE NAME : MANAGEMENT ACCOUNTING		COURSE CODE:16CCBB14
Upon Completion of the Course Students would be able to		
CO1	Understand the nature and scope of management accounting.	
CO2	Ability to construct fund flow statement and cash flow analysis and distinguish.	
CO3	Aware of cost volume profit analysis.	
CO4	Capable of master budgets and flexible budgets.	
CO5	Utilize the management tools and techniques to take appropriate financial decision.	
COURSE NAME : ENTREPRENEURIAL DEVELOPMENT		COURSE CODE:16CCBB15
Upon Completion of the Course Students would be able to		
CO1	Understand the concepts of entrepreneurship development.	
CO2	Under overcome barriers to entrepreneurship development.	
CO3	Familiar to EDP institutions in India.	
CO4	Capable of preparation of project reports.	
CO5	Aware of incentives and subsidies available for small scale industries.	
COURSE NAME : MANAGEMENT CONCEPTS IN THIRUKKURAL		COURSE CODE:16MBEBB2
Upon Completion of the Course Students would be able to		
CO1	Understand business ethics and adapting to changing environment.	
CO2	Aware of communication principles in decision making process and leadership.	
CO3	Capable of goal setting planning investment decision making.	
CO4	Develop social responsibility of business and apply knowledge to manage stress.	
	Acquire knowledge in personal selection recruitment and welfare measures through selected couplets.	

COURSE NAME :GLOBAL BUSINESS MANAGEMENT		COURSE CODE:16MBEBB3
Upon Completion of the Course Students would be able to		
CO1	Understand the fundamental concepts of international trade.	
CO2	Acquire knowledge about export promotion and export processing zones and export oriented units.	
CO3	Enhance knowledge about GATT, WTO and techniques to overcome tariff barriers.	
CO4	Comprehend basic principle of MNC's.	
CO5	Acquire broad knowledge on global liberalization and integration with the global economy.	

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PO1	An ability to apply knowledge of basic mathematics, science and domain knowledge to solve the computational problems
PO2	Acquire Knowledge of mathematical foundations, computer application theory and algorithm principles in the design and modeling of computer based system.
PO3	Earn caliber to design, analyze and development principles in the construction of complex hardware and software computer systems.
PO4	Ability to research, analyze and investigate complex computing problems through design of experiments, analysis and interpretation of data and synthesis of the information to arrive at valid conclusions.
PO5	Ability to work in multi-disciplinary team collaboration both as a member and leader, as per need

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT, THANJAVUR-S
DEPARTMENT OF COMPTER APPLICATIONS
COURSE OUTCOME

COURSE NAME : PROGRAMMING IN C	COURSE CODE : 16SCCCA1
Upon Completion of the Course Students would be able to	
CO1	Defines the concept of C programming and it's fundamental
CO2	Managing I/O operations , various control statements and looping statements.
CO3	Understanding Arrays , Strings and User defined Functions.
CO4	Differentiate Structures and unions. Defines Pointer concepts and File management
CO5	Explain the uses of pre-processors, memory allocation and Programming Guide lines.

COURSE NAME : PROGRAMMING IN C LAB	COURSE CODE : 16SCCCA1P
Upon Completion of the Course Students would be able to	
CO1	Develop programming skills using the fundamentals and basics of C Language
CO2	Develop programs using the basic elements like control statements, Arrays and Strings
CO3	Enable effective usage of arrays, structures and unions
CO4	Understanding the concepts of functions and pointers
CO5	Implement files and understanding various file modes.

COURSE NAME : PROGRAMMING IN C++	COURSE CODE : 16SCCCA2
Upon Completion of the Course Students would be able to	
CO1	Describe the procedural and object oriented paradigm with concepts of streams, classes, functions, data and objects
CO2	Understand dynamic memory management techniques using pointers, constructors, destructors
CO3	Describe the concept of function overloading, operator overloading, virtual functions and polymorphism.
CO4	Classify inheritance with the understanding of early and late binding, usage of exception handling, generic programming.
CO5	Demonstrate the use of various OOPs concepts with the help of programs

COURSE NAME : PROGRAMING IN C++ LAB		COURSE CODE : 16SCCCA2P
Upon Completion of the Course Students would be able to		
CO1	Creating simple programs using classes and objects in C++ and implement the concepts of object oriented programming	
CO2	Understanding the concept of constructors and Apply string functions to perform operator overloading	
CO3	To be able to program using C++ features such as composition of objects and function overloading	
CO4	Demonstrate Virtual functions, Inheritance & Polymorphism	
CO5	Implement Object Oriented Programs using templates and exceptional handling concepts.	

COURSE NAME : PROGRAMMING IN JAVA		COURSE CODE : 16SCCCA3
Upon Completion of the Course Students would be able to		
CO1	To acquire the programming skills with java.	
CO2	To implement the object oriented concepts with java language	
CO3	To understand the concepts of multithreading.	
CO4	To learn the art of GUI programming with Applet.	
CO5	To learn about Database connectivity.	

COURSE NAME : PROGRAMMING IN JAVA LAB		COURSE CODE : 16SCCCA3P
Upon Completion of the Course Students would be able to		
CO1	Using Graphics, Animations and Multithreading for designing Simulation and Game based applications.	
CO2	Design and develop GUI applications using Abstract Windowing Toolkit (AWT), Swing and Event Handling.	
CO3	Design and develop Web applications.	
CO4	Designing Enterprise based applications by encapsulating an application's business logic.	
CO5	Designing applications using pre-built frameworks.	

COURSE NAME : DATABASE SYSTEMS		COURSE CODE : 16SCCCA4
Upon Completion of the Course Students would be able to		
CO1	To provide the basic concepts of the Database Systems including Data Models, Storage Structure.	
CO2	Familiarize the students with a good formal foundation on the relational model.	
CO3	Basic Queries in SQL (DML, DDL) constraints and embedded SQL.	
CO4	Describe the concepts of transactions and transaction processing and the issues, techniques related to concurrency and recovery manager.	
CO5	Explore the RDBMS, Normalization forms indexing and hashing mechanisms.	

COURSE NAME : DATABASE SYSTEMS LAB		COURSE CODE : 16SCCCA4P
Upon Completion of the Course Students would be able to		
CO1	Transform an information model into a relational database schema and to use a data definition language and/or utilities to implement the schema using a DBMS.	
CO2	Use an SQL interface of a multi-user relational DBMS package to create, secure, populate, maintain, and query a database.	
CO3	Formulate query, using SQL, solutions to a broad range of query and data update problems.	
CO4	Use a desktop database package to create, populate, maintain, and query a database.	
CO5	Analyze an information storage problem and derive an information model expressed in the form.	

COURSE NAME : DATA STRUCTURE AND ALGORITHMS		COURSE CODE : 16SCCCA5
Upon Completion of the Course Students would be able to		
CO1	Understanding the linear and non-linear data structures and Ability to choose appropriate data structures to	
CO2	Ability to differentiate variety of data structures such as stacks, queues, Trees and Graphs	
CO3	Analyze the performance of Searching and Sorting techniques.	
CO4	Implement and know the application of algorithms for optimal storage and pattern matching.	
CO5	Design and apply appropriate data structures for solving computing problems	

COURSE NAME : OPERATING SYSTEM	COURSE CODE : 16SCCCA6
Upon Completion of the Course Students would be able to	
CO1	understand the basic components of a computer operating system and interactions among the various components
CO2	Compare and contrast various Memory management schemes and Page replacement policies
CO3	Understanding various CPU scheduling algorithms and remove deadlocks
CO4	Ability to differentiate storage devices and understand the components of I/O Systems
CO5	Recognize file system interface and security mechanisms such as Controlled access to files, Access protection and User authentication

COURSE NAME : DIGITAL COMPUTER FUNDAMENTALS	COURSE CODE : 16SCCCA7
Upon Completion of the Course Students would be able to	
CO1	Gain knowledge of different types of number system and Perform Number Conversions from one System
CO2	Identify the logic gates and their functionality and understand the basics of Boolean algebra
CO3	Design various logic gates and simplify Boolean functions
CO4	Learn to Design basic electronic Circuits and combinational circuits
CO5	Understand various flip flops, shift registers and the Construction of Memory Unit

COURSE NAME : SOFTWARE ENGINEERING	COURSE CODE : 16SMBECA1:2
Upon Completion of the Course Students would be able to	
CO1	Plan a software engineering process life cycle .
CO2	Able to elicit, analyze and specify software requirements with various stakeholders of the project.
CO3	Analyze and translate a specification into a design using an appropriate software engineering methodology.
CO4	Know how to develop the code from the design.
CO5	Able to use modern engineering tools necessary for software project management, time management and software reuse.

COURSE NAME : SOFTWARE ENGINEERING	COURSE CODE : MBECA1:1/10
Upon Completion of the Course Students would be able to	
CO1	Plan a software engineering process life cycle .
CO2	Able to elicit, analyze and specify software requirements with various stakeholders of the project.
CO3	Analyze and translate a specification into a design using an appropriate software engineering methodology.
CO4	Know how to develop the code from the design.
CO5	Able to use modern engineering tools necessary for software project management, time management and software reuse.

COURSE NAME : MANAGEMENT INFORMATION SYSTEM	COURSE CODE : MBECA3:3/10
Upon Completion of the Course Students would be able to	
CO1	Describes the Definition , Objectives , Uses and Limitations of MIS
CO2	Understanding Computer Softwares , Types and Trends.
CO3	Describes Management System in Business, Marketing , Human Resource.
CO4	Describes the Application of IT in Business , E-Commerce, Mobile Commerce, E-Governance, E-enterprises, etc.
CO5	Understanding Information security, Types of Breaches, Challenges , Cyber Laws and IT Act 2000 etc.

COURSE NAME : DATABASE SYSTEMS LAB	COURSE CODE : RCCS10CA5P
Upon Completion of the Course Students would be able to	
CO1	Transform an information model into a relational database schema and to use a data definition language and/or utilities to implement the schema using a DBMS.
CO2	Use an SQL interface of a multi-user relational DBMS package to create, secure, populate, maintain, and query a database.
CO3	Formulate query, using SQL, solutions to a broad range of query and data update problems.
CO4	Use a desktop database package to create, populate, maintain, and query a database.
CO5	Analyze an information storage problem and derive an information model expressed in the form.

COURSE NAME : COMPUTER GRAPHICS AND ANIMATION LAB		COURSE CODE : 16SCCCA5P
Upon Completion of the Course Students would be able to		
CO1	Use the basic tools found in Adobe Photoshop to Understand image editing and graphic design features	
CO2	Enable to know about work with images in different file formats	
CO3	Understanding to Develop a commercial brochure	
CO4	Enable to do Basic Drawing and Painting in flash	
CO5	Understanding about Animation and to Know First movement of animation	

COURSE NAME : COMPUTER NETWORKS		COURSE CODE : 16SCCCA8
Upon Completion of the Course Students would be able to		
CO1	Understand computer network basics, network architecture, TCP/IP and OSI reference	
CO2	Defines Datalink layer services , Error detection and Error correction methods	
CO3	Explain Network layer basics and routing algorithms	
CO4	Understanding TCP features and congestion control	
CO5	Enable to work with Application layer www, e-mail and DNS	

COURSE NAME : PROGRAMMING IN PHP		COURSE CODE : 16SCCCA9
Upon Completion of the Course Students would be able to		
CO1	To Store data in arrays	
CO2	Using PHP build-in functions and creating custom functions	
CO3	To create a database in PhpMyAdmin	
CO4	How to receive and process Form submission data	
CO5	To create images on Server.	

COURSE NAME : CLOUD COMPUTING	COURSE CODE : 16SMBECA2:1
Upon Completion of the Course Students would be able to	
CO1	To Store data in arrays
CO2	Understand the importance of virtualization in distributed computing and how this has enabled the development of Cloud Computing
CO3	Implement different cloud storage technologies and Service Oriented cloud systems
CO4	Understand the key security and compliance challenges of cloud computing
CO5	Choose among various cloud technologies for implementing applications

COURSE NAME : PROGRAMMING IN PHP	COURSE CODE : RCCS10CA8
Upon Completion of the Course Students would be able to	
CO1	To Store data in arrays
CO2	Using PHP build-in functions and creating custom functions
CO3	To create a database in PhpMyAdmin
CO4	How to receive and process Form submission data
CO5	To create images on Server.

COURSE NAME : COMPUTER NETWORKS	COURSE CODE : RCCS10CA9
Upon Completion of the Course Students would be able to	
CO1	Understand computer network basics, network architecture, TCP/IP and OSI reference
CO2	Defines Datalink layer services , Error detection and Error correction methods
CO3	Explain Network layer basics and routing algorithms
CO4	Understanding TCP features and congestion control
CO5	Enable to work with Application layer www, e-mail and DNS

COURSE NAME : PROGRAMMING IN PHP LAB		COURSE CODE : RCCS10CA6P
Upon Completion of the Course Students would be able to		
CO1	Use PHP to create a data driven website.	
CO2	Use PHP to read a file and add records to the database.	
CO3	Create a form on a webpage and use PHP to check the validity of the form.	
CO4	Use built-in features of PHP such as data and string manipulation.	
CO5	Test and debug PHP scripts while working with live data.	

COURSE NAME : PROGRAMMING IN PHP LAB		COURSE CODE : 16SCCCA6P
Upon Completion of the Course Students would be able to		
CO1	Use PHP to create a data driven website.	
CO2	Use PHP to read a file and add records to the database.	
CO3	Create a form on a webpage and use PHP to check the validity of the form.	
CO4	Use built-in features of PHP such as data and string manipulation.	
CO5	Test and debug PHP scripts while working with live data.	

COURSE NAME : MINI PROJECT		COURSE CODE : MBE10CAPW
Upon Completion of the Course Students would be able to		
CO1	Understand the basics of programming and able to interpret real world problems into software solutions	
CO2	Practical application of theoretical knowledge gained in order to develop real time software applications	
CO3	Identify and formulate the problem, Analyse the problem and collect necessary data.	
CO4	Enable to Design and develop the project using appropriate software by applying the programming skills	
CO5	Understanding to Implement, evaluate and generate reports.	

COURSE NAME : MINI PROJECT		COURSE CODE : 16SMBECAPW
Upon Completion of the Course Students would be able to		
CO1	Understand the basics of programming and able to interpret real world problems into software solutions	
CO2	Practical application of theoretical knowledge gained in order to develop real time software applications	
CO3	Identify and formulate the problem, Analyse the problem and collect necessary data.	
CO4	Enable to Design and develop the project using appropriate software by applying the programming skills	
CO5	Understanding to Implement, evaluate and generate reports.	

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Department of Biotechnology
Course Outcomes M.Sc. Biotechnology

PROGRAM OUTCOME M.Sc., BIOTECHNOLOGY	
PO1	To know a thorough knowledge about structure and function of cells, cellular signaling, protein trafficking, bio molecules and cellular development.
PO2	To collect, deals with various types of classification of microbes and also throws light on multifarious habitats of microbes and provides information about all the microbial cellular functions and various metabolic pathways in microbes.
PO3	To study the structure, properties and metabolism of different biomolecules and to know the interrelationships between different metabolisms. To understand the basic concepts of immune system, elucidate the immune response of humans to foreign substances and to study the modern techniques of immunology that help determine human protection.
PO4	To study the various principles underlying genetic engineering that forms the basis of rDNA technology and to study the methodologies, and in brief the applications and related issues of rDNA technology and understanding about the basics of Animal cell culture, transgenic animals, pest & animal management, Molecularmarkers and regulations about the use of Biotechnology. To study the downstream processes for product recovery in fermentation.
PO5	student will get an idea about the basic understanding about Bioinformatics, tools, sequences, algorithms and the analysis of phylogenetic tree and will give an idea about the basic principles and techniques involved in plant cell culture and to understand the concepts of transformation and achievements of biotechnology in Plant systems.to understand the chemical nature and associated microbes of food and to understand the principles of food processing, preservation and manufacture.

COURSE NAME: CELL BIOLOGY	CourseCode:P16BTE11
UponCompletionofthecoursestudentswouldbeableto	
CO 1	Cell structure -Introduction to cell,Plasma Membrane:Cell Wall:
CO2	Cell Organelles-Endoplasmic Reticulum-Ribosomes-Mitochondria-Chloroplast-Lysosomes-Peroxisomes.
CO3	Nuclear Material:Cytoskeleton:Microtubules, microfilaments & associated proteins – actin, myosin and intermediate filaments. 3 dimensional organization of cytoskeleton.,nucleus
CO4	Organization of Chromosomes, Cell Division & Cell Cycle,Cell Growth Control:

CO5	Microbial Cell Biology,Structural organization of prokaryotic cell. Cell appendages – cilia, pili, fimbriae & flagella.

CourseName:MICRO BIOLOGY	CourseCode:P16BT12
UponCompletionofthecoursestudentswouldbeableto	
CO 1	Discovery of microbial world, the experiment of Pasteur, the era of discovery of antibiotics and anaerobic life. Types and classification of microbes. Isolation, identification, characteristics and ultra structure of microbes – Viruses, Bacteria, Fungi and Algae. Various associations of microbes.
CO2	Origin and evolution of microorganisms. Concepts of species and hierarchical taxa. Bergy's system of classification – Viruses, Bacteria, Fungi. Biological nomenclature - Measurement of species richness and evenness. Simpson's diversity index – Multivariate analysis.Microbial Nutrition and Growth,Molecular Systematics.
CO3	Microbial Metabolism Influence of environment on microbial physiology. Physical factors – radiations, temperature, pH and pressure. Chemical factors – nutrients, water, C, H, O, N, P, S. Growth factors - amino acids, purines, pyrimidines, nucleosides, nucleotides, vitamins, lipids, inorganic nutrients. Antimicrobial compounds, metabolic inhibitors. Response to environment – growth and reproduction; growth inhibition and death, movement, differentiation.
CO4	Methods in Microbiology Isolation of microbes from various sources - serial dilution, pure culture and culture préservation techniques. Microbial culture collection centers. Staining techniques – Simple & differential - Gram, endospore, negative, flagellar staining
CO5	Microbial Genetics Genetic system of bacteria – transformation, transduction, recombination. Extra cellular genetic material - plasmids and transposons. Genetic systems of viruses – Phage I, RNA viruses and retroviruses. Genetic system of fungi – Yeast and Neurospora. Genetic system of protozoa and mycoplasma.

CourseName: BIOCHEMISTRY	CourseCode:P16BT13
UponCompletionofthecoursestudentswouldbeableto	
CO 1	DNA structure and properties. Restriction enzymes, DNA ligase, klenow enzyme, T4 DNA polymerase, polynucleotide kinase, alkaline phosphatase, cohesive and blunt end ligation, linkers, adaptors and homopolymeric tailing. Labeling of DNA
CO2	Plasmids, bacteriophages, M13 mp vectors, PUC19 and blue script vectors. Phagemids, lambda phage vectors, insertion and replacement vectors, EMBL, cosmids, artificial chromosome vectors (YAC, BAC), animal virus derived vectors -
CO3	Insertion of foreign DNA into host cells, transformation, construction of libraries, isolation of mRNA and total RNA. cDNA and genomic libraries, cDNA and genomic cloning, expression cloning and protein-protein interactive cloning
CO4	Primer design, fidelity of thermostable enzymes, DNA polymerases, types of PCR - multiplex, nested, reverse transcriptase, real time, touchdown, hot start, and colony. Cloning of PCR products

CO5	DNA sequencing - Enzymatic, chemical & automated DNA sequencing and RNA sequencing. Chemical synthesis of oligonucleotides, introduction of DNA into mammalian cells, and transfection techniques. Gene silencing techniques, introduction to siRNA, siRNA technology, micro RNA, construction of siRNA vectors, principle and application of gene silencing.

CourseName:MOLECULAR BIOLOGY	CourseCode:P16BT14
UponCompletionofthecoursestudentswouldbeableto	
CO 1	DNA structure and properties. Restriction enzymes, DNA ligase, klenow enzyme, T4 DNA polymerase, polynucleotide kinase, alkaline phosphatase, cohesive and blunt end lig
CO2	Plasmids, bacteriophages, M13 mp vectors, PUC19 and blue script vectors. Phagemids, lambda phage vectors, insertion and replacement vectors, EMBL, cosmids, artificial chromosome vectors (YAC, BAC), animal virus derived vectors -
CO3	Insertion of foreign DNA into host cells, transformation, construction of libraries, isolation of mRNA and total RNA. cDNA and genomic libraries, cDNA and genomic cloning, expression cloning and protein-protein interactive cloning
CO4	Primer design, fidelity of thermostable enzymes, DNA polymerases, types of PCR - multiplex, nested, reverse transcriptase, real time, touchdown, hot start, and colony. Cloning of PCR products B
CO5	DNA sequencing - Enzymatic, chemical & automated DNA sequencing and RNA sequencing. Chemical synthesis of oligonucleotides, introduction of DNA into mammalian cells, and transfection techniques. Gene silencing techniques, introduction to siRNA, siRNA technology, micro RNA, construction of siRNA vectors, principle and application of gene silencing.

	CourseName:r DNA TECHNOLOGY	CourseCode:P16BT21
	UponCompletionofthecoursestudentswouldbeableto	
CO1	Basics Concepts-DNA structure and properties. Restriction enzymes, DNA ligase, klenow enzyme, T4 DNA polymerase, polynucleotide kinase.	
CO2	Cloning Vectors -Plasmids, bacteriophages, M13 mp vectors, PUC19 and blue script vectors.	
CO3	Cloning Methodologies -Insertion of foreign DNA into host cells, transformation, construction of libraries, isolation of mRNA and total RNA.	
CO4	PCR and its Applications-Primer design, fidelity of thermostable enzymes, DNA polymerases, types of PCR.	
CO5	Sequencing Methods-Transgenics, cDNA and intragenic arrays, differential gene expression and protein array.	

	CourseName:IMMUNOLOGY	CourseCode:P16BT22
	UponCompletionofthecoursestudentswouldbeableto	
CO1	Basics Concepts-DNA structure and properties. Restriction enzymes, DNA ligase, klenow enzyme, T4 DNA polymerase, polynucleotide kinase.	
CO2	Cloning Vectors -Plasmids, bacteriophages, M13 mp vectors, PUC19 and blue script vectors.	
CO3	Cloning Methodologies -Insertion of foreign DNA into host cells, transformation, construction of	

	libraries, isolation of mRNA and total RNA.
CO4	PCR and its Applications-Primer design, fidelity of thermostable enzymes, DNA polymerases, types of PCR.
CO5	Sequencing Methods-Transgenics, cDNA and intragenic arrays, differential gene expression and protein array.
	CourseName:PLANT BIOTECHNOLOGY / **CourseCode:P16BT31**
	UponCompletionofthecoursestudentswouldbeableto
CO1	Basics of Plant Tissue culture-Plant tissue culture techniques. In-vitro pollination and fertilization. Embryo culture and its applications.
CO2	Protoplast – Culture & Genetic Manipulation
CO3	Plant Transgenesis - Agrobacterium mediated gene transfer, Agrobacterium based vectors (Ti plasmids and Ri plasmids), viral vectors and their applications.
CO4	Transgenic plants -Genetically modified foods - application, future applications, ecological impact of transgenic plants.
CO5	Plant Molecular Biology Techniques-. DNA finger printing in plants. Marker assisted selection (MAS) for crop improvement.
	CourseName:ANIMAL BIOTECHNOLOGY / **CourseCode:P16BT32**
	UponCompletionofthecoursestudentswouldbeableto
CO1	Animal Cell, Tissue and Organ Culture-Transformation of animal cells – Cloning vectors – Restriction Endonucleases, expression vectors – RTPCR - animal viral vectors and yeast vectors.
CO2	Transgenic Animals-Development and uses - mice, cattle, goat, fish and sheep and transgenic pets. Tendered meat production.
CO3	Pest and Animal Management-Biotechnological approach to the production of live feed.
CO4	Molecular Markers-Use of nucleic acid probes and antibodies in clinical diagnosis and tissue typing.
CO5	Regulating the use of Biotechnology-Regulating DNA technology – DNA barcoding. Regulating food and food ingredients. Human gene therapy.
	CourseName: BIOSTATISTICS,BIOETHICS AND IPR / **CourseCode: P16BTE3**
	UponCompletionofthecoursestudentswouldbeableto
CO1	Introduction to Biostatistics – sample, population and statistical inference.statistical treatment to proportion data.
CO2	Bioethics-Ethics and the law issues - genetic engineering, stem cells, cloning, medical techniques, transhumanism and bioweapons.
CO3	Basics of patents, types of patents. Global scenario of patents and Indian position, patenting of biological materials.
CO4	Patent Filling and Infringement.Patent infringement - meaning, scope, litigation,

CO5	Biological safetycabinets, primary containment for biohazards, biosafety levels.

	CourseName: FOOD TECHNOLOGY	CourseCode: P16BT42
	UponCompletionofthecoursestudentswouldbeableto	
CO1	Basics of Food Technology -Food chemistry: constituents of food - contribution to texture, flavour and organoleptic properties of food.	
CO2	Microbiology of Food -Sources and activity of microorganisms associated with food. Food fermentation & food chemicals.	
CO3	Food Processing -Raw material characteristics; cleaning, sorting and grading of foods; physical conversion operations - mixing, emulsification.	
CO4	Food Preservation -Use of high temperatures.	
CO5	Manufacture of Food Products -Bread and baked foods. Dairy products - milk processing, cheese, butter, ice-cream.	

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THANJAVUR-613 005.

Department of Biotechnology
CourseOutcomes

B.Sc.BIOTECHNOLOY

PO1	**TheCell biology is the study of the structure and function of prokaryotic and eukaryotic cells. In this course the students will learn different areas of cellular biology including the structure and functions of cell, its organelles, synthesis and function of macromolecules such as carbohydrate, protein, lipid, DNA & RNA; membrane structure and function; bioenergetics; cellular communication; and microscopic techniques to understand the cell structure. course about the basic of microbiology dealing types of microbes analyse medical microbiology.**
PO2	**This course is designed to given an understanding about the basics of molecular biology – classical genetics & molecular aspects.**
P03	**This courser is planned to give basic knowledge on r DNA Technology,Blotting techques ,pharmaceutical products, Gene therapy.**
P04	**This course is designed to give basic concepts of immunology.Fundemental concepts and Anatomy of the immune system.vaccinology-Clinical immunology.**
P05	**To learn about fundamentals of animal cell culture,GMOs,Gene therapy and transgenic animals.**

COURSE NAME: CELL BIOLOGY CourseCode:16SCCBT1

UponCompletionofthecoursestudentswouldbeableto

CO 1	Fundamentals of cell structure. Prokaryotic and eukaryotic cells. Cell division
CO2	Cellular membranes and matrices. Dynamic nature of membranes; cytoskeleton – structure andfunction.
CO3	Cellular organelles in metabolism. Morphology and functions of peroxisomes and glyoxisomes.
CO4	Cellular organelles in energy metabolism,Mitochondria,Chloroplast – structure and function. Structure ofnucleic acids.
CO5	Methods in cell biology.Microscopy,Use of radioisotopes.

CourseName:MOLECULAR BIOLOGY CourseCode:16SCCBT2

UponCompletionofthecoursestudentswouldbeableto

CO 1	Nucleus & Chromosomes,3 dimensional organization of cytoskeleton,chromatin,allele, loci, gene.
CO2	Nuclear division. Organization of Chromosomeschromosomalabnormalities and qualitative inheritance.Somatic cell genetics.
CO3	Central dogma of Molecular Biology,Transcription – Prokaryotic & Eukaryotic Transcription.Translation - Factors involved in translation..
CO4	Prokaryotic and Eukaryotic DNA replication Mechanism of DNA replication.Enzymes& proteins involved in DNA replication.
CO5	Regulation of gene expression.gene loss, gene amplification, gene rearrangement.

CourseName:r DNA Technology CourseCode:16SCCBT3

UponCompletionofthecoursestudentswouldbeableto

CO 1	Introduction to genetic engineering and recombinant DNA technology.
CO2	Plasmids, Phage vectors, Cosmids, Phagemids, Virus vectors, Shuttle vectors and expression vectors.
CO3	DNA amplification using polymerase chain reaction (PCR)

CO4	Analysis of recombinant DNA - Selection methods – antibiotics, expression basis, GUS expression.
CO5	Gene therapy – Haemopoietic cells, genetically engineered bone marrow cells, skin fibroblasts.

CourseName:IMMUNOLOGY CourseCode:16SCCBT4

UponCompletionofthecoursestudentswouldbeableto

CO1	Terminology – Antigen, immunogen, hapten, allergen, tolerogen, super antigens, antibody, immunoglobulin, antigenicity, immunogenicity. Self &nonself, innate & acquired immunity.
CO2	Natural built in barriers – skin, semen, saliva, tears, enzymes. Mediators of immune system - lymphokines, cytokines, interferon.
CO3	Major Histocompatibility Complex - MHC genes, MHC , T cell development, maturation,B cell development, maturation,B cell receptor and determinants. B cell subsets. Immunoglobulins.
CO4	Active, passive and combined immunization recombinant DNA, protein based, plant based, peptide, antiidiotypic and conjugate vaccines – production & applications. Role and properties of adjuvants & ISCOMS.
CO5	Immunity to infection. - Bacteria, viral, fungal and parasitic,Hypersensitivity – Type I, II, III and IV. Autoimmunity transplantation immunology.

CourseName:PLANT BIOTECHNOLOGY CourseCode:16SCCBT5

UponCompletionofthecoursestudentswouldbeableto

CO1	Plant tissue culture,in-vitro pollination and fertilization,embryogenesis and organogenesis,somaclonal variations.
CO2	Genetic manipulation of plants-methods of fusingprotoplasts, somatic hybridization.
CO3	Genetic engineering & crop improvement, herbicide resistance, insect resistance, virus resistance, plants as bioreactors.
CO4	Genetic modification in Agriculture,Transgenic plants, genetically modified food.
CO5	Production of organic food, types of organic food, identification of organic food, organic food & preservatives.

CourseName:ANIMAL BIOTECHNOLOGY CourseCode:16SCCBT6

UponCompletionofthecoursestudentswouldbeableto

CO1	Embryology-Gametogenesis and fertilization in animals, Molecular events during fertilization.
CO2	Animal cell culture-Fundamentals. Facilities and Applications. Media preparation for Animal cellsculture. Types of cell culture: Primary and secondary cell culture.
CO3	Genetic engineering in animals-GMO , methods of DNA transfer into animalcells - calcium phosphate co precipitation, micro-injection, electroporation.
CO4	Gene therapy-Mapping of human genome, Human Genome Project (HGP). RFLP, RAPD and its applications.
C05	Transgenics-Transgenic animals – Merits and demerits -Ethical issues inanimal biotechnology, transgenic microbes and animals.

CourseName:BIOSTATISTICS AND BIOSAFETY CourseCode:16SCCBT7

UponCompletionofthecoursestudentswouldbeableto

CO1	Variables - measurements, functions and limitation; Data -types of data, methods of collection of data, merits and demerits- tabulation and representation of data by frequency distribution diagram (Simple/Multiple/Subdivided bar diagram, Pie diagram), Graphs (Histogram, polygon, curve) Stem and leaf diagram.
CO2	Mean, median, mode and geometric mean; Measures of dispersion - range, mean deviations, standard deviation, Variance, Skewness, Kurtosis, quartile deviation -merits and demerits; coefficient of variations.
CO3	Hypothesis - definition, types (One tailed, two tailed); Sampling distribution and errors; Statistical Tests of significance -'t'-test, Chi-square.
CO4	Introduction, biosafety issues in biotechnology-historical background; Introduction to Biological Safety Cabinets; Primary Containment for Biohazards; Biosafety Levels; Biosafety Levels of Specific Microorganisms
CO5	Biosafety guidelines and regulations (National and International) – operation of biosafety guidelines

and regulations of Government of India; Definition of GMOs & LMOs; Roles of Institutional Biosafety Committee, RCGM, GEAC etc. for GMO applications in food and agriculture; Environmental release of GMOs.

CourseName:MICROBIAL BIOTECHNOLOGY CourseCode:16SCCBT8

UponCompletionofthecoursestudentswouldbeableto

01	Isolation and maintainance of Industrially important microorganisms.Microbial growth and death kinetics
02	To acquire the knowledge about the design of bioreactors.Understand the principles of fermentation processing and its scope in downstream processing.
03	Added the informations about the upstream processing
04	Gaining added information on the production of media formulations and production of value added products from microorganisms.
05	Gaining the knowledge about purification of fermented foods

CourseName:MICROBIAL BIOTECHNOLOGY CourseCode:16SCCBT8

UponCompletionofthecoursestudentswouldbeableto

CO1	Acquired the knowledge about the importances of IPR, Legal protections of biotechnological inventions.
CO2	Gaining the knowledge about the GATT and TRIPS agreement and budapest treaty.
CO3	Gaining the knowledge about the Indian Patent act, Patent and copy right and gaining the knowledge about the trade secrets.
CO4	knowing about Bioethics and drug testing, human cloning. Bioethics on religious rules and guidelines
CO5	Ethical aspects relating to use of genetic engineering and biowarfare, Ethical implications of Cloning and human genome project

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
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THANJAVUR-5
PG DEPARTMENT OF ENGLISH
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

DEPARTMENT OF ENGLISH	
PROGRAM OUTCOME B.A. ENGLISH	
PO1	Create literary sensibility among the students for appreciation and enlightenment of the artistic andinnovation aspects of English language and literature.
PO2	Enable students critically analyses the cultural bent from different historical periods and genres.
PO3	Provide students with the critical facilities necessary in an academic environment on the jobs and is in increasingly complex interdependent world.
PO4	Enrich the students with literary analysis and linguistic competence.
PO5	Expertise the LSRW ability of English language and its divergent forms such as prose, poetry, drama and fiction.

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PG DEPARTMENT OF ENGLISH
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

DEPARTMENT OF ENGLISH

B.A. ENGLISH

COURSE OUTCOME

COURSE NAME :PROSE	COURSE CODE:16ACCEN1
Upon completion of the course students would be able to	
CO1	To familiarize the students with different types of artistic view and innovative ideas of prose writing
CO2	To acquaint the students with cultural diversity and divergence in perspectives
CO3	To develop their critical thinking abilities and write creatively and critically
CO4	To enlarge the students vocabulary and understand the structure of sentences and grasp the idea of the author
CO5	To understand the values of life reflected in the works

COURSE NAME : SHORT STORIES	COURSE CODE:16ACCEN2
Upon completion of the course students would be able to	
CO1	To gain knowledge of the development of short stories and its types from allegorical to psychological.
CO2	To learn the elements of stort stories narrative technique,setting,style,characterisation.
CO3	To aquaint with stort story and liteary devices of allegory,metophor,satire and stream of consciousness.
CO4	To enchance reading skills and appreciate the text in a critical and creative approach.
CO5	To appreciate styles of eminent writers ranging from all ages.

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COURSE NAME : SOCIAL HISTORY OF ENGLAND		COURSE CODE:16AACEN1
Upon completion of the course students would be able to		
CO1	To make the learners understand the social and literary history of england from the middle ages to the 20th century	
CO2	To enrich realte the socio- historical background to literature	
CO3	To enrich the learners aware of the relation between socio- political and socio- religious events and literary works	
CO4	To co- relate the social history and the history of geners	
CO5	To expertize the students to analyse the history of English literature in various form of historical backgrounds	

COURSE NAME : POETRY I		COURSE CODE:16ACCEN3
Upon completion of the course students would be able to		
CO1	To comprehend the development of english poetry from one age to another through the chronological order	
CO2	To introduce the students to the basic elements of poetry.	
CO3	To enrich the students through various perspectives of reading.	
CO4	To familiarize the students with various perspectives of reading which facilitate their power of imagination in this interdependent world.	
CO5	To Expose the learners to the treme appeal of poetry exciting their love of lauguage and literature.	

COURSE NAME : FICTION		COURSE CODE:16ACCEN4
Upon completion of the course students would be able to		
CO1	To identify strengths and weaknesses as a writer of fiction	
CO2	To demonstrate a general awareness of fiction writing	
CO3	To discuss basic vocabulary of fiction.	
CO4	To Familiarize themselves with contemporary popular fiction. Appreçiate theme, characterization and setting of the novel .	
CO5	To Transform fiction into modern screen play.	

COURSE NAME : LITERARY FORMS	COURSE CODE:16AACEN2
Upon completion of the course students would be able to	
CO1	To acquire familiarity with a wide variety of forms, styles,structures, and modes in English Literature
CO2	To read and analyze a variety of texts critically
CO3	To identify and understand the significance of these forms in shaping a texts meaning
CO4	To enrich the learners to understand the literary terms while analyzing and interpreting the works of literature
CO5	To initiate learners ability to study to study of various literary

COURSE NAME : POETRY II	COURSE CODE:16ACCEN5
Upon completion of the course students would be able to	
CO1	To introduce learners to the changing trends in english poetry.
CO2	To help learners to analyse and appreciate poetry critically
CO3	To enable learner to comprehend the sailent features of various types of poetry.
CO4	To make learners to sharpen their poetic sendibility and stylistic skills.
CO5	To provide a broad ideas on social and historical concepts.

COURSE NAME : ONE ACT PLAYS	COURSE CODE:16ACCEN6
Upon completion of the course students would be able to	
CO1	Appreciate the structure and organization of one-act plays
CO2	Identify and discuss the theoretical elements of the plays.
CO3	Understand dramatic techniques used in the plays to explore socio-cultural ideas and issues.
CO4	Develop an appreciation and respect for the characterization in the plays.
CO5	Analyse critically the theme, plot and cultural aspects prevalent in the play

COURSE NAME : HISTORY OF ENGLISH LITERATURE -I	COURSE CODE:16AACEN3
Upon completion of the course students would be able to	
CO1	To help learners aware of the literary history of the texts from the Age of Chaucer to Dryden.
CO2	To make learners understand the rise and fall of literary movements and their relationships to socio - political and socio religious events.
CO3	To perceive a chronological survey of the major writers and their writings that have contribute to the development of English literature.
CO4	To comprehend the outline of English literature based on the three important aspects of England namely Political ,religious and social .
CO5	To acquire knowledge about the three basic geures of literature namely Poetry,Prose and drama.

COURSE NAME : DRAMA	COURSE CODE:16ACCEN7
Upon completion of the course students would be able to	
CO1	To introduce learners to the emergence of English
CO2	Drama from the Elizabethans to the 20th century To make learners understand the features of tragedy, comedy of humours, anti- sentimental comedy, drama of ideas and absurd play
CO3	Demonstrate knowledge of theatre and dance history and literature and draw connections between theatrical practices and social contexts in both modern and pre modern periods.
CO4	Develop and apply process skills in rehearsal, production and classroom settings.
CO5	Demonstrate problem-solving skills in the creation of artistic work.

COURSE NAME : INTRODUCTION TO LANGUAGE AND LINGUISTIC	COURSE CODE:16ACCEN8
Upon completion of the course students would be able to	
CO1	To understand the origin of language and the development of writing.
CO2	To comprehend basic grammatical and semantic categories of English
CO3	To impart an understanding of human communication through an objective study of language.
CO4	To familiarize students with the key concepts of linguistics and develop awareness of the latest trends in the area.
CO5	To utilize phonetic dictionary symbols to continue to improve pronunciation.

COURSE NAME : HISTORY OF ENGLISH LITERATURE -II		COURSE CODE:16AACEN4
Upon completion of the course students would be able to		
CO1	To help learners aware of the literary history of the texts from the Age of Chaucer to Dryden.	
CO2	To make learners understand the rise and fall of literary movements and their relationships to socio - political and socio religious events.	
CO3	To perceive a chronological survey of the major writers and their writings that have contribute to the development of English literature.	
CO4	To comprehend the outline of English literature based on the three important aspects of England namely Political ,religious and social .	
CO5	To acquire knowledge about the three basic geures of literature namely Poetry,Prose and drama.	

COURSE NAME :SHAKESPEARE		COURSE CODE:16ACCEN9
Upon completion of the course students would be able to		
CO1	To make the students to understand thethemes in Shakespeare's play.	
CO2	To analyse the structure and organizationof Shakespeare's complete work.	
CO3	To enable the learners to identify the major literary works.	
CO4	To instill the learners to come across the literary work of Shakespeareand apply the same in professional life.	
CO5	To enrich the students to appreciate and enjoy with the complete works and foe an literary analysis.	

COURSE NAME : PRINCIPELS OF LITERARY CRITICISM		COURSE CODE:16ACCEN10
Upon completion of the course students would be able to		
CO1	To recognize poetry from a variety of cultures, languages and historic periods	
CO2	To understand and appreciate poetry as a literary art form	
CO3	To analyze the various elements of poetry, such as diction, tone, form, genre, imagery, figures of speech, symbolism, theme, etc.	
CO4	To recognize the rhythms, metrics and other musical aspects of poetry	
CO5	To inculcate a deeper appreciation of cultural diversity by introducing them to poetry from a variety of cultures throughout the world	

COURSE NAME : AMERICAN LITERATURE	COURSE CODE:16ACCEN11
Upon completion of the course students would be able to	
CO1	To identify major historical and cultural developments of colonial America; explain key concepts
CO2	To identify the major conventions, tropes, and themes of abolitionist literature and slave narratives; identify and discuss those features with regard to individual authors/works
CO3	By the end of the course the student will be able to identify features of short story as a literary genre
CO4	By the end of the course the student will be able to identify features of novel as a literary genre
CO5	By the end of the course the student will be able to define the elements of short story and novel as literary genres, and their importance for literary analysis

COURSE NAME : INDIAN CULTURE AND LITERATURE	COURSE CODE:16ACCEN12
Upon completion of the course students would be able to	
CO1	To Identify the ways Indian texts speak about and are influenced by history, language, caste, economics, religion, gender, regional differences, sexuality and culture.
CO2	To analyze literary texts and recognize the limitations of such analysis, especially due to the challenges of reading non-western texts in a predominantly western academic setting.
CO3	To analyse the approaches of Indian texts, including those that illuminate how South Asians debate and understand their own literary and cinematic traditions.
CO4	To apply the challenges and wisdom gained in reading South Asian texts to other intercultural encounters in academics, business, politics, and community.
CO5	To write clear, focused, coherent essays about literature for an academic audience, using standard English conventions of grammar and style.

COURSE NAME : TRANSLATION: THEORY AND PRACTICE	COURSE CODE: 16MBEEN1
Upon completion of the course students would be able to	
CO1	Understand the techniques and practical aspects of translation
CO2	To develop ability to translate documents calling for different registers
CO3	To apply knowledge/competence over two separate languages
CO4	To gain access to the cultures backing the source language and the target language (as meanings are also cultural)
CO5	To examine ethical issues in the translation process.

COURSE NAME : INDIAN WRITING IN ENGLISH	COURSE CODE:16ACCEN13
Upon completion of the course students would be able to	
CO1	To appreciate the historical trajectory of various genres of Indian Writing in English from colonial times to till the present
CO2	To analyze Indian literary texts written in English in terms of colonialism, postcolonialism, regionalism, and nationalism
CO3	To understand the role of English as a medium for political awakening and the use of English in India for creative writing
CO4	To analyze how the sociological, historical, cultural and political context impacted the texts selected for study
CO5	To analyse the strength and constraints of Indian English as a literary medium.

COURSE NAME : COMMON WEALTH LITERATURE	COURSE CODE:16ACCEN14
Upon completion of the course students would be able to	
CO1	To appricate all the literary works under commonwealth literatureas a part of English Literature
CO2	To understand the global relevance ,significance and resonance of commonwealth literature from past to present day
CO3	To analyse and evaluate the postcolonial aspect of the literary works
CO4	To appreciate the contribution of translation studies to commonwealth literature
CO5	To refine their written and spoken language as an outcome of regular seminar presentation

COURSE NAME : ENGLISH LANGUAGE TEACHING	COURSE CODE:16ACCEN15
Upon completion of the course students would be able to	
CO1	To Identify literary techniques and creative uses of language in literary texts
CO2	To adapt their texts to particular audiences and purposes
CO3	To articulate a thesis and present evidence to support it
CO4	To find, evaluate, and use appropriate bibliographic materials in their texts
CO5	To explain the relevance of themes found in literary texts to contemporary, personal, and cultural values

COURSE NAME : JOURNALISM	COURSE CODE: 16MBEEN2
Upon completion of the course students would be able to	
CO1	Create literary sensibility and produce a complex digital news package that engages students with relevant facts, visuals and technical components
CO2	Apply media ethics and inclusivity when working with the public, including marginalized populations
CO3	Apply emotionally intelligent interviewing skills for working in deadline-driven situations
CO4	Express strong writing, editing and proof-reading skills for reporting the news
CO5	Critique the contextual factors that shape the media in a diverse, globalized media landscape

COURSE NAME : ENGLISH FOR COMPETITIVE EXAMINATIONS	COURSE CODE: 16MBEEN3
Upon completion of the course students would be able to	
CO1	To familiarize the students with different types of artistic view and innovative ideas of prose writing
CO2	To acquaint them with the cultural diversity and divergence in perspectives
CO3	To develop their critical thinking abilities and write creatively and critically
CO4	To enlarge their vacabulary and understand he structure of sentences and grasp the idea of the author
CO5	To understand the value of life reflected in the works

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THANJAVUR-5
PG DEPARTMENT OF ENGLISH
ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

PROGRAM OUTCOME MA ENGLISH

PO1	To prefer better social adoptability and creat original literaturein at least one genre.
PO2	To make the learners get to know the contempory state of research in the prefered area of their choice of research.
PO3	To demonstrate broad understanding of literature in English and translation and appreciate the historical significance in the creation and interpretation of literary works.
PO4	To write and speak effectively for specific audience and purpose in university,public and professional life.
PO5	To enable learnrs to appreciate the changing trends in Indian Literature in English.

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PG DEPARTMENT OF ENGLISH

ATTAINMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

COURSE NAME :LANGUAGE AND LINGUISTIC	COURSE CODE:P16EN11
Upon completion of the course students would be able to	
CO1	To understand the origin of language and language structure also its function
CO2	To classify ancient and traditional perpective of language use in the society and in research perpesctives.
CO3	To analyse the grammatical theories of western country history as well as India and the creation of language.
CO4	To speak and write effeciently for professionl life and in society
CO5	To understand the application of linguistic and other related discipline.

COURSE NAME :MODERN LITERATURE I(1400-1660)	COURSE CODE:P16EN12
Upon completion of the course students would be able to	
CO1	To expose the students with literary modernism and to know the silent features of english knowledge
CO2	To familiarize the students with the themes with dominated modernist literature
CO3	To make the students gain a sound and understanding of the modernist aesthetic as well as the cultural, political, and philosophical ethoss
CO4	To sensitize the students to the elements of form and the modernist aesthetic
CO5	To expose learners to the changing trends in english literature

COURSE NAME : MODERN LITERATURE-II(1660-1798)	COURSE CODE:P16EN13
Upon completion of the course students would be able to	
CO1	To expose the students with literary modernism and to know the silent features of english knowledge
CO2	To familiarize the students with the themes with dominated modernist literature
CO3	To make the students gain a sound and understanding of the modernist aesthetic as well as the cultural, political, and philosophical ethoss
CO4	To sensitize the students to the elements of form and the modernist aesthetic
CO5	To expose learners to the changing trends in english literature

COURSE NAME : INDIAN WRITING IN ENGLISH	COURSE CODE:P16EN14
Upon completion of the course students would be able to	
CO1	To enable learners to appreciate the changing trends, from romantaic to realistic , in indian literature in english from pre to post Independence era.
CO2	To make learners aware of indian sensiblity in the representative works.
CO3	Awarness towards the problems of interpreting Indian Culture via acquiantance with the work of significant Indian writers of writings .
CO4	To analyse Indian literary texts wrtten in english in term of colonialism post colonialism regionalism and nationalism .
CO5	To evaluate critically the contribution of major Indian English dramatists.

COURSE NAME : GRAMMAR,RHEROTIC AND WRITING	COURSE CODE:P16ENE1
Upon completion of the course students would be able to	
CO1	To enable the students to understand the basics of grammar
CO2	To provide learners with the art os speaking and writing rhetirically
CO3	To demonstrate a broad understanding in various forms mof listening
CO4	To help the learners to co-up effectively with professional life
CO5	To make the readers to know the art of speaking and art of persuading

COURSE NAME : MODERN LITERATURE-III(1798-1832)	COURSE CODE:P16EN15
Upon completion of the course students would be able to	
CO1	To expose the students with literary modernism and to know the silent features of english knowledge
CO2	To familiarize the students with the themes with dominated modernist literature
CO3	To make the students gain a sound and understanding of the modernist aesthetic as well as the cultural, political, and philosophical ethoss
CO4	To sensitize the students to the elements of form and the modernist aesthetic
CO5	To expose learners to the changing trends in english literature

COURSE NAME : MODERN LITERATURE-IV(1832-1945)	COURSE CODE:P16EN16
	Upon completion of the course students would be able to
CO1	To introduce learners to the origin of English essays
CO2	To demonstrate a board and coherent body of knowledge with depth in the underlying principles and concept
CO3	To apply an independent approach to knowledge that uses rigorous methods of inquiry and appropriate methodologies that are applied with intellectual honesty
CO4	To acquaint learners with the unique qualities of the essays
CO5	To enable learners to understand the spirt of England and influnce.

COURSE NAME : SHAKESPHEARE	COURSE CODE:P16EN23
	Upon completion of the course students would be able to
CO1	To Expose learners to the development of lingustic, social, pycological and existential skills through a few reprensentative lays of Shakespeare.
CO2	To make learners to understand the characterization and poetic technics of Shakespeare.
CO3	To make learners to understand the difficulties and the downfall of a King or Noble
CO4	To make learners to understand it is Shakesears last Play.
CO5	To help learners understand Shakespere's theatre and audience.

COURSE NAME : LITERARY CRITICISIM	COURSE CODE:P16EN23
	Upon completion of the course students would be able to
CO1	Students should be familiar with literary and culture texts
CO2	Student should be able to write analytically in a variety of format including essays, research papers reflective writing in critical reviews
CO3	Student should be able apply critical and theoritical approaches to the reading and analysis in literature
CO4	To femiliarize the ideas, value and themes which impact in culture and society both now and in the past
CO5	To be proficency in oral communication and writing through critical understanding on the literature of various countries

COURSE NAME : COMMUNICATIVE STUDIES AND MASS MEDIA	COURSE CODE:P16ENE2
Upon completion of the course students would be able to	
CO1	To introduse learners for different types of communication
CO2	To exposs learners to the various functions of mass media to create originallity
CO3	To make learners understand mass communication
CO4	To help the learners to become successful communicators
CO5	To provide learners to acquire comprehensive coverage of all dimensions in communication

COURSE NAME : AMERICAN LITERATURE	COURSE CODE:P16EN13
Upon completion of the course students would be able to	
CO1	To analyse and dicuss works of american literature a range of genres
CO2	To identify relationships between the moments a American history , colonial and their representation.
CO3	To articulate ways that American Literature reflects complex historical and cultural experience .
CO4	To produce a mix of critical , creative and reflective works about American Literature.
CO5	To make the learners get aquainted with various works of eminent American writers

COURSE NAME : THEORY OF CAMPARATIVE LITREATURE &	COURSE CODE:P16EN32
Upon completion of the course students would be able to	
CO1	To make to understand comparative literacy is the study of the text from different cultural contexts
CO2	To make understand comparative literature is essential to the history of literature and criticism.
CO3	We understand some foreign works may have passive influence upon in National writer
CO4	To help understand pure imitations is a conscious process of adapting certain parts of a foreign work
CO5	To proved understand genre has been an important element of comparative literature curriculum

COURSE NAME : LITERARY THEORY	COURSE CODE:P16EN32
	Upon completion of the course students would be able to
CO1	Familiarize students with the literary premises and intellectual background pertinent to important eras of the literary and critical theory.
CO2	If literature puts our identities into play, sometime precariously, it may be understood as enabling us to experiment with possible selves and to instruct us
CO3	Provide students with the critical faculties necessary in an academic environment, on the job, and in an increasingly complex, interdependent world.
CO4	Students should be able to apply critical and theoretical approaches to the reading and analysis of literary and cultural texts in multiple genres.
CO5	Students should be able to ethically gather, understand, evaluate and synthesize information from a variety of written and electronic sources.

COURSE NAME : RESEARCH METHODOLOGY	COURSE CODE:P16EN32
	Upon completion of the course students would be able to
CO1	To expose learners to have a clarity in research
CO2	To enable learners to use different research sources and document them of their choice
CO3	To make the learners understand the format of research of various literary works
CO4	To instill the students of research for effective writing skills
CO5	To explore the learners to understand the trends and specific mechanics of writing research papers

COURSE NAME : ASIAN LITERATURE	COURSE CODE:P16EN32
	Upon completion of the course students would be able to
CO1	To make learners aware of various Asian cultures through the writings of various eminent writers
CO2	To enable learners to aprreciate the changing trends in English literature
CO3	To sensitize the learners have a wide range of knowledge in poetry, prose,drama,novel and literature
CO4	To make students aware of the impact of energing philosophies across the broad spectrum of world literature
CO5	To expose the students tom the pluralistic aspects of Asian Culture and Identity

COURSE NAME : NEW LITERATURE IN ENGLISH		COURSE CODE:P16EN32
	Upon completion of the course students would be able to	
CO1	To demonstrate a broad and coherent body of knowledge with depth in the underlying principles and concepts.	
CO2	To integrate knowledge of the diversity of cultures and peoples.	
CO3	To apply critical thinking, independent judgment, intercultural sensitivity and regional, national and global perspectives to identify and solve problems in English	
CO4	To demonstrate capacity for reflection, planning, ethical decision- making and inter-disciplinary team work in diverse contexts of community engagement.	
CO5	The students would have gained knowledge for analyzing critically a work of art.	

COURSE NAME :TRANSLATION THEORY AND PRACTICE		COURSE CODE:P16EN32
	Upon completion of the course students would be able to	
CO1	To understand the techniques and practical aspects of translation	
CO2	To develop ability to translate documents calling for different registers	
CO3	To apply knowledge/competence over two separate languages	
CO4	To gain access to the cultures backing the source language and the target language (as meanings are also cultural)	
CO5	To examine ethical issues in the translation process.	

COURSE NAME :SINGLE AUTHOR STUDY-RABINDRANATH TAJORE		COURSE CODE:P16EN32
	Upon completion of the course students would be able to	
CO1	To expose the learners to the aspects of Indian civilization and culture with reference to Rabindranath Tagore	
CO2	To iniate the learners into the study of Tagore"s works and his narrative techniques	
CO3	To make studentds learn to compare and contrast themes, analyze text and illustrations of the authors life and works	
CO4	To make the students learn to speak, wright, effectievly on a particular author	
CO5	To enable the learners no various trends in writing in the translated works of Tagore	

COURSE NAME :ENGLISH FOR UGC EXAMINATIONS	COURSE CODE:P16EN32
Upon completion of the course students would be able to	
CO1	To help learners have a wide range of knowledge in literature – poetry, prose, drama, short story and novel .
CO2	To help learners prepare for UGC Eligibility tests for JRF and Assistant Professorship
CO3	To exploit the cultural, literary, utilitarian, linguistic and integrative enquiry-centred functionalities of English in India.
CO4	To coordinate the four communication skills of Listening, Speaking, Reading and Writing to maximise holistic competencies
CO5	To repurpose the role of English in a globalized India.

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Thanjavur – 5

PG Department of Fashion Technology & Costume Designing

PROGRAM OUTCOME:-

PO1	To understand the fashion concepts and scope of fashion industry and basic principles of designing and knowledge about fashion accessories and designing for figure irregularities
PO2	To gain skillfulness in sewing techniques and draping patterns for basic garments details, to learn pattern alteration skills and garment fitting.
PO3	To educate a students about understand the working principle of textile testing equipment's , textile dyeing and printing and make them understand various textile finishes.
PO4	To create an idea for making different accessories and Embroidery in India. To gain practical knowledge about how to construct a garment
PO5	To make student understand the significance and impact practical for portfolio. To aquire knowledge about how to design and develop a garment in computer.

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COURSE OUTCOME:-

COURSE NAME: INTRODUCTION TO FASHION DESIGNING	COURSE CODE:16SCCFT1
Upon completion of the course students would be able to	
CO1	To understand the fashion concepts and scope of fashion industry
CO2	To know the basic principles of designing
CO3	learn about fashion industry, boutique and fashion marketing
CO4	Study about designs principles and structure of the art.
CO5	To know about scope of fashion business, choosing career in fashion and fashion service organization.

COURSE NAME: FASHION CLOTHING & PSYCHOLOGY	COURSE CODE:16SCCFT2
Upon completion of the course students would be able to	
CO1	To explain student with fashion accessories and current scenario of the world fashion centers
CO2	To teach about all kind of fashion accessories like ancient and modern with prepare a picture album for accessories.
CO3	Learn about figure irregularities, wardrobe planning and factors to consider while selecting clothes for different age groups.
CO4	Understand about factors affecting fashion changes.
CO5	To know about fashion forecasting and designer types.

COURSE NAME: WET PROCESSING	COURSE CODE:16SCCFT3
Upon completion of the course students would be able to	
CO1	To educate students about textile dying and printing
CO2	To make them understand various textile finishes
CO3	Understand about calendaring, stentering, stiffening, Etc.,
CO4	To know about need for preparatory process in textiles.
CO5	Learn about need of textile chemical processing

COURSE NAME: GARMENT MANUFACTURING TECHNOLOGY	COURSE CODE: 16SCCFT4
Upon completion of the course students would be able to	
CO1	To make the students aware of marker making
CO2	To learn the sewing machine mechanism
CO3	To enhance the student's perception of the commercial environment understanding of manufacturing technology, marketing, and management principles.
CO4	Learn about the basic concepts related to apparel industry
CO5	Gain basic understanding of various techniques employed for patternmaking in the fashion industry

COURSE NAME: FASHION BUSINESS	COURSE CODE: 16SCCFT5
CO1	To make the learners to know the basic communication process
CO2	To understand fashion communication

CO3	To introduce to the segments of fashion industry and merchandise planning
CO4	To equip the students with the understanding of the principles of management
CO5	To understand the sectors of luxury industry and luxury brands.

COURSE NAME: TEXTILE TESTING	COURSE CODE: 16SCCFT6
CO1	To impact knowledge on fiber yarn and fabric testing
CO2	To make the leaners understand the working principles of textile testing equipment
CO3	To acquaint with testing methods involved in testing of textiles for various enduses
CO4	To learn the utility of different testing methods and principles involved in evaluation of textiles.
CO5	To familiarise with various quality parameters of fabrics for various end uses

COURSE NAME: EXPORT DOCUMENTATION	COURSE CODE: 16SCCFT7
CO1	To expose the leaners to international export markets
CO2	To impact knowledge on trading policies
CO3	To enhance free trade at global level and attempt to bring all the countries together for the purpose of trading.
CO4	To increase globalization by integrating the economies of different countries.
CO5	To achieve world peace by building trade relations among different nations.

COURSE NAME: QUALITY AND COST CONTROL	COURSE CODE: 16SCCFT8
CO1	To know about raw material quality control specification
CO2	To understand the importance of quality control in textiles and apparel industries
CO3	To understand the concept of Quality and the Implication of Quality on Business To Implement Quality Implementation Programs
CO4	To have exposure to challenges in Quality Improvement Programs
CO5	To give information about the role of Q.A & Q.C in validation and certification of the raw materials and end products.

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(UGC Recognized under 2(f) and 12(B) Institution)
(Affiliated to Bharathidasan University, Tiruchirappalli.)
THANJAVUR - 613 005.

PG DEPARTMENT OF FASHION TECHNOLOGY & COSTUME DESIGNING

PROGRAM OUTCOME:-

PO1	Acquaintance to knowledge- Familiarities with terms related to fashion, textile production and processing designing and knowledge about fashion accessories and designing for figure irregularities
PO2	To gain development of innovative products from acquired knowledge and skill.
PO3	To create confidently express the knowledge gained with good quality for designing and technology transfer
PO4	To create an accruing Research Abilities, develop scientific perceptive to relocate acquired knowledge into proper research techniques
PO5	To make rational thought incorporation extend self - learning performance to improve inspiration , recognize ethical issues for company start ups

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COURSE OUTCOME:-

COURSE NAME: TECHNICAL TEXTILE	COURSE CODE:P16FT11
CO1	To know the development of textiles in various fields.
CO2	To orient students to the field of technical textiles
CO3	To enable them to learn the development in technical textiles.
CO4	To understand the home textile, medical textile, and transportation textile
CO5	Learn about Textile product used in defense

COURSE NAME: APPAREL PRODUCTION TECHNOLOGY	COURSE CODE: P16FT12
CO1	To impact knowledge about marketing and merchandising.
CO2	To understand the role played by the fashion buying office
CO3	Understand the importance and elements of costing in apparel industry.
CO4	To knowing about market analysis, buyer behavior of fashion merchandising.
CO5	To enable students to gain knowledge in marketing research method, prepare the customer profile and trade publication

COURSE NAME: APPAREL STANDARDS AND QUALITY CONTROL	COURSE CODE: P16FT13
CO1	Students will gain insight about fashion industry.
CO2	Students will develop comprehensive understanding of the fashion industry, its markets, and the particular role of the fashion product designer and developer within the industry.
CO3	Students will understand the importance of labels, it making as well as it connectivity with consumers
CO4	Students will be able to understand working of various department of fashion industry
CO5	To give knowledge about importance of packaging

COURSE NAME: TEXTILE WET PROCESSING	COURSE CODE: P16FT14
CO1	To educate students about dry and wet processing for common fabrics
CO2	Understand about preparatory process and its types.
CO3	To make them understand about various types and classification dyeing and methods of dyeing.
CO4	To learn detailed about printing methods and procedure for printing
CO5	To know about textile finishing and its methods.

COURSE NAME: FASHION CONCEPTS	COURSE CODE: P16FT21
CO1	Understanding of Fashion Terminology and concepts
CO2	Apply the concept of fashion and culture
CO3	Recall elements and principles of design

CO3	Recall elements and principles of design
CO4	Determination of right designs design study
CO5	Creating products or designs based on the inspiration from fashion brands

COURSE NAME: PATTERN MAKING AND CLOTHING CONSTRUCTION	COURSE CODE: P16FT22
CO1	To understand the Fabric Terms, Balance, Line Terms, Seams, Notches, Grain lines.
CO2	To acquire knowledge about pattern making and grading.
CO3	To understand about Draping and Flat pattern technique
CO4	Learn about built up mechanism and pattern alteration.
CO5	To knowing about grading techniques and methods for knitted garment.

COURSE NAME: APPAREL MERCHANDISING	COURSE CODE: P16FT23
CO1	Students to get a preview to develop merchandising skills for apparel products.
CO2	This course covers the basic knowledge of fashion; textile and apparel industry, Safety Management and introduction to merchandizing
CO3	To the awareness about apparel business plans, market target is and design brief. Scopes of this course include Market trend assessment, Determine design brief, Identification of Design brief and analyze.
CO4	To understand the merchandiser's way to set the objectives to develop the product given following the work flow and the norms required. T
CO5	To understand how the merchandiser coordinates with the factory to check on the smooth running of it to meet the delivery line.

COURSE NAME: ENTREPRENEURSHIP DEVELOPMENT	COURSE CODE:P16FT24
CO1	To increase the knowledge and skill of existing entrepreneurs and encourage others to become one
CO2	To search and identify the best existing and upcoming business ideas and opportunities.
CO3	To generate employment and self-employment with the help of Entrepreneurship and the growth of small scale businesses.
CO4	To Learn about the Business Idea

COURSE NAME: KNITTING GARMENT TECHNOLOGY	COURSE CODE: P16FT41
CO1	To educate students about dry and wet processing for common fabrics.
CO2	Understand about preparatory process and its types.
CO3	To make them understand about various types and classification dyeing and methods of dyeing
CO4	To learn detailed about printing methods and procedure for printing.
CO5	To know about textile finishing and its methods.

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Department of Hotel Management
Programme Outcomes

B.Sc., Hotel Management & Catering Science

Upon Completion of the course students would be able to	
PO 1	To understand the evolution of the catering industry, F & B Service Operations, Kitchen Stewarding, Front Office and ancillary services in housekeeping, nutrition education and its methods.
PO2	To providing with hospitality professional techniques and use tools competently in the hygienical preparation, presentation and service of quality foods and also to develop the hospitality operations personal skills.
PO3	Have exposure to the hospitality and business sector will be able to gain knowledge, skills, and experience which make them extremely employable in the hospitality and tourism industry as well as in sales, marketing and business development.
PO4	To inculcate holistic implementation of knowledge and competence in the operations of hospitality and tourism sector with entrepreneurial initiative in the field of hospitality and its allied sectors.
PO5	To complete study of the service and practice of beverages, various food standards and confectionery products as well as management practice and analyses situation, identifies problems, formulates solutions and implements corrective measures and action management into hospitality and its related sectors.

Department of Hotel Management
Course Outcomes

B.Sc., Hotel Management & Catering Science

Course Name: Basics of Food Production I	Course Code: 16SCCHM1
Upon Completion of the course students would be able to	
CO 1	Know the essentials of Basic Culinary knowledge.
CO2	Identify the various commodities used in food preparation.
CO3	Illustrate the methods of processing foods.
CO4	Differentiate the between selection and identification of raw materials.
CO5	Classify the cooking equipments used in food production.
Course Name: Front Office and Accommodation Operations I	**Course Code: 16SACHM1**
Upon Completion of the course students would be able to	
CO 1	Receive bookings and handle baggage - Distinguish the front office cashiering - Handle guest's requests and maintain records.
CO2	Handle reservation activities – Receive the guest and assign their rooms.
CO3	Monitor the activities of bell desk – Handle the modes of payments - Identify the currencies, capitals and airways of different countries.
CO4	Identify the classification of cleaning agents and equipment – Handle the cleaning of various surfaces.
CO5	Inspect the cleaning of rooms and public areas – Do first aid for emergencies – Prevent and diffuse fire.
Course Name: Food and Beverage Service	**Course Code: 16SCCHM2**
Upon Completion of the course students would be able to	
CO 1	Understand the evolution of the catering industry
CO2	Study about Restaurant operations, and service equipment.
CO3	Understand about kitchen stewarding and pantry functions.
CO4	Enable the student to understand the importance of menu and menu planning.
CO5	Acquire in-depth knowledge about non-alcoholic beverages and tobacco.

Course Name: Front Office and Accommodation Operations II	Course Code: 16SACHM2
Upon Completion of the course students would be able to	
CO 1	Know the essentials of Basic Culinary knowledge
CO2	Identify the various commodities used in food preparation
CO3	Illustrate the methods of processing foods.
CO4	Differentiate the between selection and identification of raw materials
CO5	Classify the cooking equipments used in food production.

Course Name: International Cookery	Course Code: 16SCCHM3
Upon Completion of the course students would be able to	
CO 1	Define the Basics of in Continental Cuisine.
CO2	Categorize the Meditrean & continental Cuisine.
CO3	List out the types of Oriental Cuisine
CO4	Bring out the Traces of South and North American Cuisine.
CO5	Illustrate the Basics of Middle Eastern and East European Cookery.

Course Name: Beverage Services	Course Code: 16SACHM3
Upon Completion of the course students would be able to	
CO 1	Understand of beverages and its classification-Roll and important and functions of wine.
CO2	Study the definition of sprits and its classification.
CO3	Explore about beer and its types- Service techniques-production.
CO4	Understanding of cocktail and wine harmony.
CO5	Study about control measure of the beverage and practices.

Course Name: Nutrition and Food Science	Course Code: 16SCCHM4
Upon Completion of the course students would be able to	
CO 1	Give a good knowledge of Health & Nutrition and its under disciplinary
CO2	Assess the Nutritional Status in food
CO3	Measures to overcome malnutrition deficiency
CO4	Understand the various food Standards
CO5	Know the Nutrition Education and its Methods

Course Name: Hotel Administration and Entrepreneurship	Course Code:16SACHM4
Upon Completion of the course students would be able to	
CO 1	Ensure the student to have Broad knowledge about the hotel administration and to become a successful entrepreneur.
CO2	Exhibit the paths of success in Hotel Industry.
CO3	Develop the Leadership Qualities.
CO4	Know the service , Demand Management and Revenue Management.
CO5	Built the Student to become a good and successful entrepreneur and gain the knowledge of Business Enterprise and Finance.

Course Name: Bakery and Patisserie	Course Code: 16
Upon Completion of the course students would be able to	
CO 1	Define the aims Organizational Structure equipments
CO2	Raw Materials used in Bakery and Confectionary
CO3	Examples and Methods of Preparing Yeast Dough Products
CO4	Methods of Preparing Pastries, Cakes and Cookies
CO5	Kinds of Icings and Preparatory Methods

Course Name: Tourism Management	Course Code: 16SCCHM6
Upon Completion of the course students would be able to	
CO 1	Understand the industry of Tourism of exhibiting its different types and its components.
CO2	Know the Growth of Tourism and its Developments.
CO3	Execute the functions of Travel Agencies.
CO4	Know the different organization involved in the Industry of Tour promote.
CO5	Improve the student knowledge for the promotion.

Course Name: Advanced Front Office Management	Course Code: 16SCCHM7
Upon Completion of the course students would be able to	
CO 1	State the budget operations to be held in front office.
CO2	Measure the concept of yield management system and procedures.
CO3	Illustrate the usage of MIS in front office.
CO4	Brief the health and safety precautions for staff and guests.
CO5	Identify the fire and its diffusing methods.

Course Name: Hospitality Services	Course Code: 16SMBEHM1
Upon Completion of the course students would be able to	
CO 1	Enable the student to understand and to demonstrate appropriate skill of the following.
CO2	Understand of various modes of transport and its catering services.
CO3	Exploration of ship caterings cruise and its study.
CO4	Study about hospital catering and its menu planning-hospital tray service technique.
CO5	Study about industrial and institutional catering food service-Benefits of subsidy offered by management and study about outdoor catering and its functions-Miscellaneous forms of catering.

Course Name: Advanced Accommodation Operations Management	Course Code: 16SCCHM8
Upon Completion of the course students would be able to	
CO 1	Identify the fibers, their types and their usage in hotel industry
CO2	Controlling methods of pests
CO3	Identify the interiors needed for various areas and occasions
CO4	Brief the nature, types and performance of lightings.
CO5	Explain the environmental practices needed for housekeeping.

Course Name: Food and Beverage Management & Cost Control	Course Code: 16SCCHM9
Upon Completion of the course students would be able to	
CO 1	Gain knowledge about the selection and procurement.
CO2	The principles to be adopted for the purchase and its procedure for procurement.
CO3	Know the items and its security in the purchasing system.
CO4	The Techniques of cost control in the products.
CO5	Evaluate the cost control techniques.

Course Name: Food Safety and Hygiene	Course Code: 16SMBEHM2
Upon Completion of the course students would be able to	
CO 1	Enquiry the Students knowledge about the agents of Food Spoilage.
CO2	Take Precautious Steps or to prevent the Food Spoil.
CO3	Know about the Nutrition and its Classifications.
CO4	Make the Students gain knowledge about Healthy Nutrition and its value.
CO5	Know about Health Beneficiaries and the measures to have a hygiene Food and its improvement.

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Department of Hotel Management
Programme Outcomes for
French Language

B.Sc., Hotel Management & Catering Science

Upon Completion of the course students would be able to	
PO 1	Acquisition of basic language skills in French – Practice of Comprehension, Translation, and Communication and Initiation to Grammar and Composition writing.
PO2	Introduction of French language and the pronunciation of alphabets and vocabulary, noun, pronoun.
PO3	Interaction to guest fulfill their requirements. To develop the French dialogue writing in all situation - order, reservation, cancellation and modification.
PO4	Types of verb and their conjugation, articles, numbers, fruits and vegetables.
PO5	Grammar: Method of conjugation, principle and auxiliary verb. Tenses: present, past, future, imperfect, present continuo's tense, recent past, immediate future. Translation: French to English.

BHARATH COLLEGE OF SCIENCE & MANAGEMENT
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Department of Hotel Management
Course Outcomes for French Language

B.Sc., Hotel Management & Catering Science

Course Name: Communication in French - I	Course Code: 16LCFHM1
Upon Completion of the course students would be able to	
CO 1	Builds the students' French vocabulary in Hotel Management.
CO2	Equip the students with the basic language skills in French.
CO3	Enables comprehension of the language of the native speakers.
CO4	Promotes basic interaction in French in different contexts of the hotel industry with simple words and phrases.
CO5	Enriches the learners' knowledge of the French culture and civilization.
Course Name: Communication in French - II	**Course Code: 16LCFHM2**
Upon Completion of the course students would be able to	
CO 1	Communicate effectively in oral and written communication.
CO2	Demonstrate motivation in advancing to higher learning programmes.
CO3	Providing the necessary skills to become a future manner in hospitality industry.
CO4	Help to identify the problems in the work field and strategies to work with people from various cultural backgrounds.
CO5	Dialogue practicing how to order the food and rectify the problem in hotel industries.
Course Name: Communication in French - III	**Course Code: 16LCFHM3**
Upon Completion of the course students would be able to	
CO 1	Promotes the employability skills of the learners.
CO2	Get accustomed with restaurant culture
CO3	Promotes communication in French in different contexts of hotel management.
CO4	Aggrandize terminology pertinent to the hotel domain.
CO5	Enriches the learners' knowledge of French gastronomy and restauration.
Course Name: Communication in French - IV	**Course Code: 16LCFHM4**
Upon Completion of the course students would be able to	
CO 1	French Classical Menu and Compiling the menu.
CO2	Preparing curriculum vitae, preparing menu card.
CO3	Method of conjugation, past perfect tense, immediate future and recent past.
CO4	Dialogue practicing, reception counter, bar counter and restaurant.
CO5	Improving language skills in French through dialogue base and group discussion in the students.

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Department of Hotel Management
Programme Outcomes

M.Sc., Hotel Management & Catering Science

Upon Completion of the course students would be able to	
PO 1	To demonstrate professional skills in all domains of hospitality industry.
PO2	To take decisions to handle guests and diverse situations encountered in the hospitality industry.
PO3	To efficiently operate industry used technology, equipment and tools.
PO4	To Communicate effectively in handling guests and also preparations of various cooking, inter-personal relations and with society at large.
PO5	To work with required capability in teams as well as provide leadership in carrying out assigned tasks and preparations.

Department of Hotel Management
Course Outcomes

M.Sc., Hotel Management & Catering Science

Course Name: Front Office Management	Course Code: P16HM12
Upon Completion of the course students would be able to	
CO 1	Define front desk operations and procedures.
CO2	Identify the responsibilities of front office in interdepartmental communications and security functions.
CO3	Elucidate the front office management operations
CO4	Explain the concept and elements of yield management
CO5	Enumerate the night audit functions and procedures.
Course Name: Food and Beverage Service Management	**Course Code: P16HM13**
Upon Completion of the course students would be able to	
CO 1	Understanding purchasing function, organization and the administration, Distribution system, Buyers relationship.
CO2	Enable the students to understand purchase specification, optimal prizes, suppliers, payment policy, ordering and receiving storage procedure, security system.
CO3	Enable the student to gaining the convenience.
CO4	Evaluate the cost control techniques.
CO5	Enable the student to understand par stock.
Course Name: Food Production Theory	**Course Code: P16HM14**
Upon Completion of the course students would be able to	
CO 1	Depth knowledge to the learner on basics of cookery.
CO2	Classify the learner on the types of kitchen and the personnel.
CO3	Differentiate the learner on various commodities used in catering industry.
CO4	Emphasize the learner on the art of making the preparation of food.
CO5	Stress the learner on the importance of kitchen hygiene and rules regulations.
Course Name: Principles of Service Marketing	**Course Code: P16HM21**
Upon Completion of the course students would be able to	
CO 1	Extinguish the principles of service in Marketing.
CO2	Understand the service rendered the Customers.
CO3	Instinct the Principles of service by executing strategies in Quality.
CO4	Update and know the role of Marketing in Strategic planning.
CO5	Create a well equipped knowledge about Customarily Service and Hospitality.
Course Name: Event Management	**Course Code: P16HM22**
Upon Completion of the course students would be able to	
CO 1	Exhibit and built the leadership qualities by managing the Events
CO2	By planning and executing the programmed event with proper schedule and organization.
CO3	Equip a quiet basic knowledge about decorative and attractive execution of stage and the function of public relative action related to it.
CO4	Develop the quality of program organizer.
CO5	Ensure the sources of Finding Agencies, additional Revenue and to give suggestion for Menus.

Course Name: Personality and Soft Skill Development	Course Code: P16HM31
Upon Completion of the course students would be able to	
CO 1	Make the student aspire the importance and significance of communication.
CO2	Initiate the students the mechanics of Human Brain and its attributes and Functions.
CO3	Endure the students knowledge with Advising and Counseling
CO4	Enrich the students positive attitude and their exhibitions in their working Area/Place and initiate the leadership Qualities.
CO5	Quality developing positive thinking and leadership Qualities for their future endeavors and to acquire the knowledge of basic skills
Course Name: Research Methodology	Course Code: P16HM32
Upon Completion of the course students would be able to	
CO 1	Describe the nature and scope of Business Research methods
CO2	Appraise the probability and non-probability sampling methods
CO3	Evaluate the various methods of primary and secondary data collection
CO4	Adapt the data analysis through statistical software
CO5	Devise the oral and written report preparation
Course Name: Basic Baking Science	Course Code: P16HM41
Upon Completion of the course students would be able to	
CO 1	Differentiate the learner on wheat and its types.
CO2	Classify the learner on types fats eggs yeasts.
CO3	Define the reader on the production of Bread and cakes
CO4	Give an in-depth knowledge on cookies
CO5	Familiarize the learner on Bakery equipments
Course Name: Catering Management	Course Code: P16HM42
Upon Completion of the course students would be able to	
CO 1	Understand concepts and functions of catering management
CO2	Know the importance and guidelines of menu planning
CO3	Aware of functions and types of menus followed in catering institutes
CO4	Understand the importance of food selection , purchase and storage of food
CO5	Gain knowledge on different purchasing methods and guidelines followed in catering institutes

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Department of Hotel Management
Programme Outcomes for
French Language

M.Sc., Hotel Management & Catering Science

Upon Completion of the course students would be able to	
PO 1	To demonstrate professional skills in all domains of hospitality industry.
PO2	To take decisions to handle guests and diverse situations encountered in the hospitality industry.
PO3	To efficiently operate industry used technology, equipment and tools.
PO4	To Communicate effectively in handling guests and also preparations of various cooking, inter-personal relations and with society at large.
PO5	To work with required capability in teams as well as provide leadership in carrying out assigned tasks and preparations.

Department of Hotel Management
Course Outcomes for French Language

M.Sc., Hotel Management & Catering Science

Course Name: Hospitality French	Course Code: P16HM11
Upon Completion of the course students would be able to	
CO 1	Introduction to the language: French alphabets and their pronunciation, kinds of accents, used written in French.
CO2	Hotel industry related and common vocabularies and their pronunciation, fruits and vegetables, utilizing vessels of service and cooking materials.
CO3	Salutation the guest in different way and different situation.
CO4	Self introduction: how to introduce in French language, how to introducing the neighbor and their profession and various kinds of profession.
CO5	How to greeting the guest, how to reply a greeting in French language, communication skill developing for interacting to the guest in a hotel.

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Department of Hotel Management
Programme Outcomes

M.Phil., Hotel Management & Tourism

Upon Completion of the course students would be able to	
PO 1	The Candidates shall be able to understand the basics of Research
PO2	The Candidates shall gain a knowledge on the sources of data collection and to analyze the results based on data
PO3	The Candidates shall gain a knowledge on Types of Research and to apply the same while compiling dissertation
PO4	The Candidates shall gain a complete knowledge on various steps involved in compiling a dissertation
PO5	The Programme will enable the applications of computer in the operational aspects of Tourism and Hospitality Industry

Department of Hotel Management
Course Outcomes

M.Phil., Hotel Management & Tourism

Course Name: Research Methodology	Course Code: M18HMT1
Upon Completion of the course students would be able to	
CO 1	Understand the objectives of Research
CO2	Apply various methods of Research in Tourism & Hospitality Operations
CO3	Impart knowledge on data collection techniques
CO4	Impart the knowledge of computer applications
CO5	Enable the students to compile dissertation

Course Name: Emerging Issues in Hospitality and Tourism Management	Course Code: M18HMT2
Upon Completion of the course students would be able to	
CO 1	Able to understand the importance of Human Resources Management in Hotels and Travel Related Establishments.
CO2	Able to understand the process of budgeting in Hospitality Operations.
CO3	Make the students to understand the importance of customer satisfaction in Building Reputation of Hotels.
CO4	Understand the advantages & limitations of automation in Hospitality and Tourism related units.
CO5	Understand the meaning of Business ethics and its role in Managing Tourism & Hotel Industries.

Course Name: Teaching and Learning skills	Course Code: M18TLS3
Upon Completion of the course students would be able to	
CO 1	Develop skills of ICT and apply them in Teaching Learning context and Research.
CO2	Be able to use ICT for their professional development.
CO3	Leverage OERs for their teaching and research.
CO4	Appreciate the role of ICT in teaching, learning and Research.
CO5	Develop communication skills with special reference to Listening, Speaking, Reading and Writing.

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PG DEPARTMENT OF INFORMATION TECHNOLOGY

PROGRAM OUTCOME - M.Sc. INFORMATION TECHNOLOGY

PO1	Apply the knowledge of Mathematics, Science and Computing in the core Information Technologies.
PO2	Create, Select, and Apply appropriate techniques, resources and modern Information Technology tools including prediction and modeling to complex activities with an understanding of the limitations.
PO3	Develop techniques for Capturing, Analyzing and Storing the digital data in a structure format. Develop and Implement solutions to real time problems using latest algorithms and techniques
PO4	Design and Integrate different networks for fast and secure data transfer in the different network platforms.
PO5	Enrich the skill set to meet professional expectations in the Multimedia, Image processing, IoT, Mobile Application Development, and Augmented Reality, Provide Web based solutions in the field of Commerce and Industry

COURSE :DISTRIBUTING TECHNOLOGY	**SUBJECT CODE: P16IT11**
CO1	To understand the basic strategies involved in remote computation and to know the basic technologies used such as Java and DOT NET.
CO2	To learn how to access data from the database and how to create views.
CO3	To develop sites with navigation, adrotator,image map controls etc.
CO4	To learn Mobile application development in ASP.NET
CO5	To understand the role of Web Services in developing a distributed application.

COURSE : WEB SERVICES	**SUBJECT CODE: P16IT12**
CO1	Understand the principles of SOAP
CO2	To Understand XML concepts
CO3	Efficiently use market leading environment tools to create and consume web services.
CO4	Identify and select the appropriate framework components in creation of web service solution.
CO5	Apply OOP principles to creation of web service solutions.

COURSE :OOAD & UML	SUBJECT CODE:P16IT13
CO1	To understand the Object-based view of Systems.
CO2	To develop robust object-based models for Systems.
CO3	To inculcate necessary skills to handle complexity in software design.
CO4	Specify, analyze and design the use case driven requirements for a particular system.
CO5	Identify, Analyze the subsystems, various components and UML Structural models.

COURSE :ORGANIZATIONAL BEHAVIOUR	SUBJECT CODE:P16IT14
CO1	Introduction to Organizational Behavior, foundations of Individual Behavior, Making Decisions.
CO2	Individual Personalities and Behaviors, values, Job Satisfaction.
CO3	Motivation in the Workplace, Learning, Theories of Motivation.
CO4	Conflict and Negotiation and Module, Managing Stress and Emotions.
CO5	Communication in the Workplace, Leadership.

COURSE : DISTRIBUTING TECHNOLOGY LAB	SUBJECT CODE:P16IT15P
CO1	Developing applications for distributed environments.
CO2	Implement various applications using build systems.
CO3	Developing a project to multi view of the records.
CO4	Understand various version control systems.
CO5	Develop a web service program that has an ASP.NET client.

COURSE : MOBILE COMPUTING	SUBJECT CODE: P16IT21
CO1	Understand the principles of Mobile networks and to know the emerging technologies such as RFID, WiMax etc.,
CO2	To learn the Global System for Mobile Communications, its routing, addresses and SMS.
CO3	To understand what GPRS is and to understand the difference between 3G networks and CDMA.
CO4	Get familiar with Android and IOS environment.
CO5	To learn how to develop and publish android mobile applications.

COURSE : MULTIMEDIA TECHNOLOGY	SUBJECT CODE:P16IT22
CO1	To identify a range of concepts, techniques and tools for creating and editing the interactive multimedia applications.
CO2	Learning the current and future issues related to multimedia technology.
CO3	Both theoretical and practical aspects in designing multimedia systems surrounding the emergence of multimedia technologies.
CO4	Image Compression Techniques, digital video standards, formats and technology.
CO5	Identify the future multimedia computing technologies (Audio and Video Compression).

COURSE :MOBILE COMPUTING LAB	SUBJECT CODE:P16IT23P
CO1	Able to know about the types of WLANs, the components of a typical WLAN and the services offered by a WLAN
CO2	Summarize the protocols used at the MAC layer and scheduling mechanisms.
CO3	Examine the routing mechanisms and transport layer and network security solutions in ad hoc wireless networks
CO4	Evaluate the energy management schemes and Quality of service solution in ad hoc networks.
CO5	Acquire skills to design and implement a basic mobile ad hoc or wireless sensor networks via simulations.

COURSE :CLOUD COMPUTING	SUBJECT CODE:P16ITE1A
CO1	To impart fundamental concepts in the area of cloud computing. To impart knowledge in applications of cloud computing
CO2	Understand the concepts, characteristics, delivery models and benefits of cloud computing.
CO3	Understand the different characteristics of public, private and hybrid cloud deployment models.
CO4	Understand the key security and compliance challenges of cloud computing.
CO5	Understand the key technical and organizational challenges.

COURSE :E COMMERCE	SUBJECT CODE:P16ITE2B
CO1	Understand the basic concepts of E- commerce and its applications.
CO2	To gain the knowledge of an overview of internet applications.
CO3	Understand the concepts architectural framework for electronic commerce.
CO4	To gain the knowledge of electronic payment systems.
CO5	To know and apply various advertising and the marketing on the internet.

COURSE :J2EE TECHNOLOGIES	SUBJECT CODE: P16IT31
CO1	To design and develop web based distributed enterprise applications using J2EE. To understand the architecture of Enterprise applications.
CO2	To learn the basic interaction services such as RMI and CORBA.
CO3	Understand the concepts such as JDBC and presentation services such as JSP, Servlets and java mail.
CO4	To develop Enterprise JavaBean
CO5	To develop a concept of JNDI and Struts framework.

COURSE:NETWORK SECURITY		SUBJECT CODE:P16IT32
CO1	Classify the symmetric encryption techniques.	
CO2	Illustrate various Public key cryptographic techniques.	
CO3	Discuss authentication applications.	
CO4	Summarize the intrusion detection and its solutions to overcome the attacks.	
CO5	Understand the concepts of system level security.	

COURSE :J2EE TECHNOLOGIES LAB		SUBJECT CODE:P16IT33P
CO1	Interpret the need for advanced Java concepts like enumerations and collections in developing modular and efficient programs.	
CO2	Describe the working of servlet program.	
CO3	Evaluate the program for JSP work with JDBC.	
CO4	Illustrate database access and details for managing information using the JDBC API.	
CO5	Describe how servlets fit into Java-based web application architecture.	

COURSE :BIG DATA ANALYSIS		SUBJECT CODE:P16ITE3A
CO1	To Understand the Big Data challenges & opportunities, its applications.	
CO2	Understand d the concept, opportunities of big data, NOSQL. Understood components of big data like, MR, Hadoop, PIG etc	
CO3	Understanding of concepts of map and reduce and functional programming.	
CO4	Describe the concept Map and reduce and how work.	
CO5	Gain conceptual understanding of Hadoop Distributed File System.	

COURSE :SOFTWARE ENGINEERING	SUBJECT CODE:P16ITE4A
CO1	Developing complex and evolving software-intensive systems
CO2	Plan and deliver an effective software engineering process, based on knowledge of widely used development lifecycle models
CO3	Employ group working skills including general organization, planning and time management and inter- group negotiation.
CO4	Capture, document and analysis requirements.
CO5	Translate a requirements specification into an implementable design, following a structured and organised process

COURSE :INTERNET OF THINGS	SUBJECT CODE: P16IT41
CO1	Define Concepts the Internet of Things.
CO2	Understand of IoT connectivity methods, technologies, Protocols.
CO3	Evaluate The Internet of Things.
CO4	Describe Internet of Things Privacy, Security and Governance.
CO5	Design a model for smart city.

COURSE :DISTRIBUTED OPERATING SYSYTEM	SUBJECT CODE :P16IT42
CO1	To provide hardware and software issues in modern distributed systems.
CO2	To get knowledge in distributed architecture, naming, synchronization, consistency and replication, fault tolerance, security, and distributed file systems.
CO3	To analyze the current popular distributed systems such as peer-to-peer (P2P) systems will also be analyzed
CO4	To know about Shared Memory Techniques
CO5	Have Sufficient knowledge about file access.

COURSE :OPEN SOURCE TECHNOLOGIES LAB	SUBJECT CODE: P16IT43P
CO1	Understand the installation of various packages in open source operating systems
CO2	Understand the concepts of HTML5, CSS, JavaScript, XML, PHP and develop JavaScript programs.
CO3	Develop XML program to display student information using CSS.
CO4	Understand different types of Files, File system and basic file system commands.
CO5	Understand the concepts of advance file concepts, commands related to Shell script and filter commands.

COURSE : HUMAN COMPUTER INTERACTION	SUBJECT CODE:P16ITE5B
CO1	To understand the concepts and techniques for effective interaction between humans and computers.
CO2	To learn about cognitive theory, adaptive induction rules and dialog management strategies.
CO3	To understand the role of recommender systems.
CO4	To learn Ontology tools for reasoning and visualizing.
CO5	To do a case study on Ambient Intelligence.

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(UGC Recognised 2 (f) & 12 (B) Institution)
(Affiliated to Bharathidasan University , Tiruchirappalli-24.)

PG DEPARTMENT OF INFORMATION TECHNOLOGY

B.Sc. INFORMATION TECHNOLOGY

PROGRAM OUTCOME

PO1	Apply the knowledge of Mathematics, Science and Computing in the core Information Technologies.
PO2	Identify, design, and analyze complex computer systems and implement and interpret the results from those systems.
PO3	Design, implement and evaluate a computer-based system, or process component, to meet the desired needs within the realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
PO4	Select and apply current techniques, skills, and tools necessary for computing practice and integrate IT- based solutions into the user environment effectively.
PO5	Apply contextual knowledge to assess professional, legal, health, social and cultural issues during profession practice.

COURSE OUTCOME

COURSE : INTRODUCTION TO INFORMATION TECHNOLOGY SUBJECT CODE :16SCCIT1	
CO1	To understand the basics of Computers and Communications
CO2	To learn the architecture and the various devices for input, output, storage and processing.
CO3	To learn basics on Computer programming languages, database management, data mining and online Analytical Processing.
CO4	To be acquaint with the computer networks, WWW, Internet and security issues in networking
CO5	To learn about multimedia applications and to know about the computer security threats and prevention.

COURSE : BASIC COMPUTER USAGE LAB	SUBJECT CODE: 16SCCIT1P
CO1	Performing basic editing functions, formatting text, copy and moving objects and text.
CO2	Learning the formatting skills on paragraphs, tables, lists, and pages.
CO3	Applicable knowledge and uses of accepted business style formatting conventions and Creating and producing a mail merge
CO4	Working knowledge of using Word's themes and clip art to create a variety of visual effects.
CO5	Understanding the process of inserting graphics, pictures, and table of contents, Drop Cap.

COURSE : PROGRAMNING IN C	SUBJECT CODE : 16SCCIT2
CO1	To impart the basic knowledge of Programming skills. To understand what are tokens and its usage in the program.
CO2	To familiarize with decision making statements such as branching and looping and to learn performing input and output operations.
CO3	To understand the concepts of Numerical and Character Arrays and the role of user defined functions in any language.
CO4	To learn structures, unions and file for handling large volume of data
CO5	To learn memory allocation and handling data , uses of preprocessors and to give guidelines on effective programming.

COURSE : PROGRAMMING IN C LAB	SUBJECT CODE : 16SCCIT2P
CO1	Learn how to execute C code using Turbo C compiler.
CO2	Develop C code using Arrays.
CO3	Develop C code using pointers.
CO4	Develop C code using Conditional branching statements.
CO5	Develop C code using String manipulation functions.

COURSE : PROGRAMMING IN CPP	SUBJECT CODE :16SCCIT3
CO1	To impart basic concepts of Object Oriented Programming and to learn the basic constructs in C++ Programming.
CO2	To acquaint with using Constructors, Operator Overloading and Type Conversions.
CO3	To learn the concepts of Inheritance, Polymorphism and Pointers.
CO4	To understand how to handle exceptions and handle file operations.
CO5	To learn the various standard libraries available for developing a Program.

COURSE : PROGRAMMING IN CPP LAB	SUBJECT CODE-16SCCIT3P
CO1	Develop a C code using String manipulation functions.
CO2	Write simple programs using classes and objects.
CO3	Write simple programs to implement overloading concepts.
CO4	Understand the concepts of inheritance and polymorphism.
CO5	Understand pointers, virtual functions and I/O statements.

COURSE : PROGRAMMING IN JAVA	SUBJECT CODE:16SCCIT4
CO1	To understand the basic concepts of OOPs and to learn the Java Development toolkit with its runtime environment. Also to learn the features, applications and structure of a java Program.
CO2	To introduce the basic building blocks of java such as data types, variables, Operators, Control structures, Arrays and functions.
CO3	To learn access modifiers, packages and Interfaces.
CO4	To understand how to create both built in and user defined exceptions and handling them, to learn the purpose of creating and using Threads.
CO5	To introduce them the concept of handling files and to create web programs using Applets.

COURSE : PROGRAMMING IN JAVA LAB	SUBJECT CODE :16SCCIT4P
CO1	Build Java applications which follow OOP principles.
CO2	Demonstrate the concepts of polymorphism and inheritance.
CO3	Apply error handling techniques in java programs.
CO4	Implement a java program using a vector class.
CO5	Design a program using AWT class features.

COURSE :DATA STRUCTURES AND ALGORITHM	SUBJECT CODE - 16SCCIT5
CO1	Understand basic data structures such as arrays, linked lists, stacks and queues.
CO2	Solve problem involving graphs, trees .demonstrate fundamental algorithmic problems including Tree Traversals, Graph traversals, and shortest paths.
CO3	Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data
CO4	Solve Greedy Method, Optimal Storage on Taps, Knapsack problem, Job Sequencing and optimal merge patterns.
CO5	Apply Algorithm for 8 Queen Problems and some of subset, Graph Coloring.

COURSE :COMPUTER NETWORK	SUBJECT CODE - 16SCCIT5
CO1	To learn the basics of Computer networks such as network models, protocols, data transmission mediums, Multiplexing and switching techniques.
CO2	To understand the functions performed in data link layer such as error detection and correction and various Access Controlling techniques.
CO3	To learn the network layer services such as addressing, Routing and switching.
CO4	To learn the protocols used in transport layers and to learn the error and flow control mechanisms.
CO5	To imapart the services provided in the application layer like http , WWW and email.

COURSE :OPERATING SYSTEM	SUBJECT CODE:16SCCIT7
CO1	To learn the fundamental concepts in Operating system design and development.
CO2	To learn the algorithms on memory management techniques like dynamic allocation, paging, virtual memory and cache memory.
CO3	To understand processor management techniques - scheduling algorithms, Interruption - deadlocks, Multiprocessing and synchronizing methods.
CO4	To learn on Device management like storage and access, communication among devices and Management of I/O requests.
CO5	To understand handling of files , organization, storage and retrieval methods.

COURSE : COMPUTER GRAPHICS AND ANIMATION LAB	SUBJECT CODE:16SCCIT5P
CO1	Understand and apply the various predefined functions for drawing various geometric shapes
CO2	Explain and analyze various algorithms to scan, convert the basic geometrical primitives, transformations. Area filling, clipping.
CO3	Explain, illustrate and design various kinds of viewing and Projections
CO4	To understand the fundamentals of animation, virtual reality, and its related technologies.
CO5	Define, explain and apply various concepts associated with computer graphics to develop the animated game.

COURSE :SOFTWARE ENGINEERING	SUBJECT CODE:16SMBEIT1:1
CO1	To provide knowledge of the various phases of Software Engineering Process.
CO2	The idea of decomposing the given problem into Analysis, Design, Implementation, Testing and Maintenance phases.
CO3	Providing an idea of using various process models in the software industry according to given circumstances.
CO4	To gain the knowledge of how Analysis, Design, Implementation, Testing and Maintenance processes are conducted in a software project.
CO5	Various processes used in Software industry for the development of a software product.

COURSE : MOBILE COMPUTING	SUBJECT CODE:16SCCIT8
CO1	To understand the Architectures, Synchronization Process and Operating Systems in Mobile Computing.
CO2	Describe how mobile technology functions to enable other computing technologies.
CO3	GSM and GPRS evaluate the effectiveness of different mobile computing frameworks.
CO4	Evaluate the effectiveness of different mobile computing frameworks and data Synchronization.
CO5	Make use of mobile operating systems in developing mobile applications

COURSE:DATABASE SYSTEMS	SUBJECT CODE:16SCCIT9
CO1	To provide the basic concepts of the Database Systems including Data Models, Storage Structure.
CO2	Familiarize the students with a good formal foundation on the relational model.
CO3	Basic Queries in SQL (DML, DDL) constraints and embedded SQL.
CO4	Describe the concepts of transactions and transaction processing and the issues, techniques related to concurrency and recovery manager.
CO5	Explore the RDBMS, Normalization forms indexing and hashing mechanisms.

COURSE : DATABASE SYSTEMS LAB	SUBJECT CODE:16SCCIT6P
CO1	Ability to design and implement a database schema for given problem.
CO2	Ability to formulate queries using SQL DML/DDL/DCL commands
CO3	Analyze the various constraints to populate the database through SQL Queries.
CO4	Present the result of database creation and querying process, document it
CO5	Apply the Conceptual Design Model and Database Hierarchical Structure to construct the real-world Requirement.

COURSE : PROGRAMMING IN PHP		SUBJECT CODE-16SMBEIT2:2
CO1	To understand the concepts of PHP and to learn how operators, strings and flow controls are used in PHP.	
CO2	To learn how to handle data in web browser using PHP functions.	
CO3	To understand the concept of Advanced Object Oriented Programming.	
CO4	To learn handling Cookies, sessions and files using PHP.	
CO5	To learn using AJAX .	

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THANJAVUR -5

DEPARTMENT OF MATHEMATICS

PO NO.	PROGRAMME OUTCOMES Upon completion of the B.Sc., Degree Programme, the graduate will be able to
PO1	Remember the fundamental concepts of Mathematics
PO2	Imbibe the skills necessary to effectively translate mathematical aspects to the general public
PO3	Develop Critical thinking ability so as to improve Employability and Decision making.
PO4	Apply Mathematical Models to solve critical problems.
PO5	Apply the concepts studied, in real life situations.

COURSE OUTCOMES

Course Name: Differential Calculus and Trigonometry	Course Code: 16SCCMM1
Upon Completion of the course Students would be able to	
CO1	Learn the basics of differentiation and their applications
CO2	Understand and apply the concepts of envelopes using the Cartesian formula for radius of curvature.
CO3	Evaluate the expansions of trigonometric functions.
CO4	Evaluate the expansions of hyperbolic functions and inverse hyperbolic functions.
CO5	Learn about the logarithm of a complex number, summation and angles.
Course Name: Integral Calculus	**Course Code: 16SCCMM2**
Upon Completion of the course Students would be able to	
CO1	Students will be able to acquire the basic knowledge of all Integral models and methods.
CO2	Applications of Definite integrals, Integration by parts and understand the concepts of Reduction formulae.
CO3	Verify Geometric Application of integration to length, area and volume.
CO4	Evaluate areas, length of a curve and surface of revolution occurring in real life problems using multiple integrals and change of integral.
CO5	Techniques of Beta, Gamma integrals. Various integration formulae.

Course Name: Differential Equations and Laplace Transforms		Course Code: 16SCCMM3
Upon Completion of the course Students would be able to		
CO1	Define first order, higher order differential equations solvable for dy/dx, x and y.	
CO2	Discuss and demonstrate the Linear equations with variable coefficients and Variation of parameters.	
CO3	Describe the origin of Partial differential equation	
CO4	Explain PDE of second order homogeneous equations with constant coefficients	
CO5	Understand the concepts of differential equations and Laplace transforms	
Course Name: Analytical Geometry 3D		Course Code: 16SCCMM4
Upon Completion of the course Students would be able to		
CO1	Explain the coordinates in space, equation of a plane.	
CO2	Describe the concepts of straight lines and coplanar lines.	
CO3	Classify the equation of a sphere and tangent planes.	
CO4	Finding the equation of surface, intersection of straight line and quadric cone.	
CO5	To recognize the central quadric, tangent and tangent plane.	
Course Name: Sequences and series		Course Code: 16SCCMM5
Upon Completion of the course Students would be able to		
CO1	Relate the concepts of convergent, divergent and oscillating Sequences.	
CO2	Study the behavior of Monotonic functions.	
CO3	Evaluate the limit of the sequence.	
CO4	Apply the comparison test for the convergence series.	
CO5	Apply the D Alembert's ratio test, Cauchy's root test for the convergence series.	
Course Name: Classical Algebra and Theory of Numbers		Course Code: 16SCCMM6
Upon Completion of the course Students would be able to		
CO1	Find relation between the roots and coefficients of equations and symmetric functions of the roots.	
CO2	Describe transformation of equation and Reciprocal equation.	
CO3	Use Descarte's rule of sign and transformation in general.	
CO4	Understanding the concept of inequalities.	
CO5	Understanding the concept of Euler function.	
Course Name: Vector Calculus and Fourier Series		Course Code: 16SCCMM7
Upon Completion of the course Students would be able to		
CO1	Learn Vector differentiation.	
CO2	Learn Vector integration.	
CO3	Learn verifications of the theorems for Simple problems.	
CO4	Acquire the knowledge about Fourier series for periodic signals.	
CO5	Learn the development of Fourier Series in cosine and sine series.	

Course Name: Linear Algebra	Course Code: 16SCCMM8
	Upon Completion of the course Students would be able to
CO1	Understand the basic concepts of Vector spaces and Linear transformation.
CO2	To determine the solutions to problems and investigate the theoretical aspects of Basis and Dimension.
CO3	Identify and construct Linear transformations of a matrix.
CO4	To evaluate algebra of matrices and rank of a matrix.
CO5	To find Eigen values and Eigen vectors by using characteristic equation.
Course Name: Numerical Methods with MATLAB Programming	**Course Code: 16SCCMM9**
	Upon Completion of the course Students would be able to
CO1	Determine better and more accurate solution.
CO2	Understand the basic properties of MATLAB, its environment and programming.
CO3	Learn the concepts of Plotting and types of plots.
CO4	Solve the algebraic and transcendental equations.
CO5	Learn the Interpolation formulae and rules.
Course Name: Numerical Methods with MATLAB Programming (P)	**Course Code: 16SCCMM11P**
	Upon Completion of the course Students would be able to
CO1	Learn features of MATLAB as a programming.
CO2	Familiarize with all the features of MATLAB software and easily handle the software.
CO3	Develop programming skills and techniques to solve mathematical problems.
CO4	Learn graphic features of MATLAB and they can use this feature effectively in various applications.
CO5	Work as a 'MATLAB' programmer in the industry because of the hands-on practical session and this job-oriented course will help the students to get the jobs in future.
Course Name: Real Analysis	**Course Code: 16SCCMM10**
	Upon Completion of the course Students would be able to
CO1	Acquire Knowledge about basic properties of real number system.
CO2	Enhance Knowledge about the continuous and discontinuous functions.
CO3	Develop the Knowledge of derivability.
CO4	Assimilate the concept of Mean value theorems.
CO5	Discuss Riemann integral and properties of Riemann integral.
Course Name: Statics	**Course Code: 16SCCMM11**
	Upon Completion of the course Students would be able to
CO1	Gains knowledge about the nature of forces.
CO2	Acquire knowledge regarding the objects at rest.
CO3	Be aware of friction and its various forms.
CO4	Be familiar with Principle of virtual work.
CO5	Explain Types of forces and Equilibrium of a uniform homogeneous string.

Course Name: Operations Research	Course Code: 16SMBEMM1:1
	Upon Completion of the course Students would be able to
CO1	Understand the advantages and limitations of operation research
CO2	Understand the LPP and to know methods of solving problems
CO3	Understand the concepts of transportation and assignment problems
CO4	Learn about Queuing theory
CO5	Assimilate the concept of Network scheduling by CPM & PERT
Course Name: Abstract Algebra	**Course Code: 16SCCMM12**
	Upon Completion of the course Students would be able to
CO1	Define algebraic structures.
CO2	Construct substructures.
CO3	Analyze a given structure in detail.
CO4	Develop new structures based on given structures.
CO5	Compare structures.
Course Name: Complex Analysis	**Course Code: 16SCCMM13**
	Upon Completion of the course Students would be able to
CO1	Understanding and significance of Limits, Continuous functions and Differentiability for complex function and be familiar with the CR-equation.
CO2	Define Conformal Mapping, Bilinear transformations, Cross ratio and Fixed points.
CO3	Use Cauchy's integral Theorem and formula to compute line integral.
CO4	Represent functions as Taylor's series and Laurent's series.
CO5	Find Residues and evaluate complex integral using Cauchy's Residue Theorem.
Course Name: Dynamics	**Course Code: 16SCCMM14**
	Upon Completion of the course Students would be able to
CO1	Acquire the knowledge of velocity and Acceleration.
CO2	Understand the path of Projectiles and characteristics of a notion of Projectiles.
CO3	Study the Fundamental laws of impact.
CO4	Derive the formulae for simple harmonic motion.
CO5	Find out the pedal equation of central orbit.
Course Name: Graph Theory	**Course Code: 16SMBEMM2:1**
	Upon Completion of the course Students would be able to
CO1	Understand the basic definitions of graphs and their applications
CO2	Recognize the Characteristics of graph
CO3	List and relate special graphs
CO4	Learn about Planar Graphs
CO5	Understand the concepts of graph theory as an application of mathematics in

Course Name: Number Theory'		Course Code: 16SMBEMM3:2
	Upon Completion of the course Students would be able to	
CO1	Study the basic concepts of divisibility involving Euclid's Division lemma and Linear Diophantine equation.	
CO2	Study the basic principles of Permutations and Combinations.	
CO3	Acquire the knowledge of basic properties of Congruences residue system.	
CO4	Explain the Chinese remainder theorem	
CO5	Recall the concepts of arithmetic function using Mobius inversion formula.	

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THANJAVUR -5

DEPARTMENT OF MATHEMATICS

PO NO.	PROGRAMME OUTCOMES Upon completion of the M.Sc., Degree Programme, the graduate will be able to
PO1	Identify and enhance mathematical and computational strategies in order to solve mathematical problems.
PO2	Know various specialized areas of advanced mathematics and its applications.
PO3	Work as Professional mathematicians either in academia or elsewhere.
PO4	Inculcate knowledge of formulation and apply mathematical concepts which area suitable for real life applications.
PO5	Crack lectureship and fellowship exams affirmed by UGC like CSIR – NET and SET.

COURSE OUTCOMES

M.Sc., MATHEMATICS

Course Name: Algebra	Course Code: P16MA11
Upon Completion of the course Students would be able to	
CO1	Summarize the concepts of Cayle's theorem, Sylow's theorem.
CO2	Give a detailed knowledge about Euclidean Rings.
CO3	Differentiate polynomial rings over the rational field and polynomial rings over the commutate rings
CO4	Understand Extension fields, Roots of Polynomials.
CO5	Explain the concepts of Galois Theory.

Course Name: Real Analysis	Course Code: P16MA12
	Upon Completion of the course Students would be able to
CO1	Explain Sequences, Limits, Tests of convergence and Rearrangements
CO2	Describe the Limits of functions, Continuity and Differentiation of vector valued functions
CO3	Derive the existence of the Riemann - Stieltjes integral.
CO4	Explain Uniform convergence of continuity, integration and differentiation for sequences and series of functions
CO5	Describe about the functions of several variables and the contract principle.

Course Name: Ordinary Differential Equations	Course Code: P16MA13
	Upon Completion of the course Students would be able to
CO1	Learn various techniques of getting exact solutions of solvable first order equations and second order linear equations.
CO2	Perform operations with Bessel functions and Legendre polynomial along with the corresponding recurrence formulas of different functions.
CO3	Learn Picard's method of obtaining successive approximations of solutions of first order differential equations.
CO4	Recognize and solve an Eigen value by use of a characteristic equation.
CO5	Learn Autonomous system of two non-linear first order ordinary differential equations.

Course Name: Graph Theory	Course Code: P16MA14
	Upon Completion of the course Students would be able to
CO1	Concept of Subgraphs, Degrees of Vertices, Paths and Connected ness, Operations on Graphs
CO2	Learn the Vertex Cuts and Edge Cuts, Connectivity and Edge Connectivity, Trees, Definitions, Characterization and Simple Properties
CO3	Compute the Vertex Independent Sets and Vertex Coverings, Edge Independent Sets, Matchings and Factors, Eulerian Graphs
CO4	Ability to Vertex Coloring, Critical Graphs, Triangle, Free Graphs, Edge Colorings of Graphs, Chromatic Polynomials.
CO5	Learn Planar and Nonplanar Graphs, Euler Formula and its Consequences, K5 and K3,3are Nonplanar Graphs, Dual of a Plane Graph

Course Name: Integral Equations, Calculus of Variations and Transforms	Course Code: P16MA15
	Upon Completion of the course Students would be able to
CO1	Apply the concepts of calculus of variations to find the maxima and minima of quantities defined as integrals containing unknown functions.
CO2	Classify various kinds of Fourier sine and cosine transforms with their properties and simple problems.
CO3	Examine some of Hankel transform and its inverse transform.
CO4	Determine the solution of Integral equations.
CO5	Evaluate the integral equations by the method of successive approximations.

Course Name: Complex Analysis	Course Code: P16MA21
	Upon Completion of the course Students would be able to
CO1	Complex analysis, in particular the theory of conformal mappings, has many physical applications and is also used throughout analytic number theory.
CO2	Prove that Cauchy's theorem for a rectangle and disk, Use Cauchy's integral theorem and formula to compute line integrals.
CO3	Classify Removable singularities, Zeros and poles and Describe the local mapping.
CO4	Demonstrate Homology and prove general form of Cauchy theorem.
CO5	Describe the harmonic functions and calculus of residue.

Corse Name: Linear Algebra	Course Code: P16MA22
	Upon Completion of the course Students would be able to
CO1	Learn about bases and dimension.
CO2	Acquire knowledge about linear transformation.
CO3	Understand the polynomial ideals and the prime factorization of polynomials.
CO4	Understand the permutations and the uniqueness of determinants.
CO5	Learn about triangularization and diagonalization.

Course Name: Partial Differential Equations	Course Code: P16MA23
	Upon Completion of the course Students would be able to
CO1	Concept of origins of first order Partial differential equations Cauchy's problem for first order equations, Linear equations of the first order, Integral surfaces Passing through a Given curve.
CO2	Learn the Cauchy's method of characteristics, compatible systems of first order equations, Charpit's method, Jacobi's method.
CO3	Compute the origin of second order equations, second order equations in Physics, Higher order equations in Physics, Linear partial differential equations with constant co-efficient.
CO4	Ability to understand the solution of Linear Hyperbolic equations, Separation of variables. The method of Integral Transforms, Non-Linear equations of the second order.
CO5	Learn Laplace equation, Elementary solutions of Laplace's equations, Families of equipotential Surfaces, Boundary value problems, Separation of variables, Problems with Axial Symmetry.

Course Name: Fuzzy Sets and their Applications	Course Code: P16MAE1C
	Upon Completion of the course Students would be able to
CO1	Interpret fuzzy set theory and uncertainty concepts.
CO2	Identify the similarities and differences between probability theory and fuzzy set theory and their application conditions.
CO3	Apply fuzzy set theory in modeling and analyzing uncertainty in a decision problem.
CO4	Apply Decision Making Method.
CO5	Describe and discuss Multi-person Decision Making-Ranking methods, Fuzzy Linear Programming.

Course Name: Stochastic Processes		Course Code: P16MAE2A
	Upon Completion of the course Students would be able to	
CO1	Understand the stochastic models for many real life probabilistic situations	
CO2	Understanding the concepts of Markov chains.	
CO3	Identifying the concepts of Poisson process and related distributions	
CO4	Acquire the knowledge of Renewal process	
CO5	Evaluate the real-life queueing problems by comparing the conventional queueing models.	
Course Name: Classical Dynamics		**Course Code: P16MA31**
	Upon Completion of the course Students would be able to	
CO1	Define mechanical system, Generalized Co-ordinates, Constraints and Virtual work.	
CO2	Derivation of Lagrange's equation and integrals of motion	
CO3	Construct the applications of Lagrange's equations and Gyroscopic systems	
CO4	Write Hamilton's principle function and variational principles.	
CO5	The use of Hamilton-Jacobi equation and Separability.	
Course Name: Measure and Integration		**Course Code: P16MA32**
	Upon Completion of the course Students would be able to	
CO1	Classify the convergence in measures	
CO2	Ascertain the various aspects of Lebesgue measure.	
CO3	Examine about measure space and compute the integration with respect to the measure.	
CO4	Describe the Construction of Product Measures and use Fubin.	
CO5	Describe the Notion of Extended Real Valued and Complex Measures. Diagnose the measurability in product space.	
Course Name: Topology		**Course Code: P16MA33**
	Upon Completion of the course Students would be able to	
CO1	Define topological spaces and explain the properties of order topology, product topology, subspace topology, continuous functions.	
CO2	Describe the properties on metric topology	
CO3	Gain the knowledge of connected spaces.	
CO4	Apply domain knowledge for compact space with examples.	
CO5	State and prove Urysohn lemma, Urysohn Metrization theorem and The Tietz Extension Theorem.	
Course Name: Discrete Mathematics		**Course Code: P16MAE3B**
	Upon Completion of the course Students would be able to	
CO1	Recall the concept of relations and functions.	
CO2	Construct mathematical arguments using logical connectives and qualifiers	
CO3	Acquire the knowledge of lattices as partially ordered sets.	
CO4	Obtain the knowledge of Boolean algebra.	
CO5	Learn about Grammar and Languages.	

Course Name: Advanced Operations Research	Course Code: P16MAE4B
	Upon Completion of the course Students would be able to
CO1	Concept of Integer Programming Problems and Cutting plane method, Mixed IPP, Branch and Bound method
CO2	Learn the Dynamic (multistage) algorithm, applications of Dynamic Programming
CO3	Compute the Decision theory and Value of the game, Dominance property and Graphical method by Game theory
CO4	Ability to understand Deterministic inventory and Probability inventory, EOQ and Material Requirement planning
CO5	Learn Non-Linear Programming Algorithm, Direct method, constrained Algorithms, Separable, Quadratic, Geometric, Stochastic Programming, Linear Combination method and SUMT algorithm.

Course Name: Functional Analysis	Course Code: P16MA41
	Upon Completion of the course Students would be able to
CO1	Recognize the fundamental properties of normed spaces and the transformations between them.
CO2	Understand the central concepts from functional analysis, including the Hahn Banach Theorem, the Open Mapping Theorem and the Closed Graph Theorem.
CO3	Understand the main properties of bounded operators of Hilbert spaces.
CO4	Understand the notion of Hilbert Spaces and apply the spectral theorem to the resolution of integral equations
CO5	Understand the basic properties of Banach Algebra

Course Name: Differential Geometry	Course Code: P16MA42
	Upon Completion of the course Students would be able to
CO1	Concept of space curve, Arc length, tangent, normal and binormal, curvature and torsion, contact between curves and surfaces, tangent surface.
CO2	Learn the curves on a surface, Surface of revolution, Helicoids, Metric, Direction coefficients, families of curves, Isometric correspondence, Intrinsic properties.
CO3	Compute the Geodesics, Canonical geodesic equations, Normal property of geodesics, Geodesic parallels, Geodesics curvature, Gauss- Bonnet Theorem.
CO4	Ability to understand the second fundamental form, Principal curvature, Lines of curvature, Developable,Developable associated with space curves and with curves on surface.
CO5	Learn Compact surfaces whose points are Umblics, Compact surface of constant curvature, Complete surface and their characterization, Hilbert's Theorem.

Course Name: Advanced Numerical Analysis		Course Code: P16MA43
	Upon Completion of the course Students would be able to	
CO1	Apply various methods to solve transcendental and polynomial equations	
CO2	Solve system of linear algebraic equations and Eigen value problems	
CO3	Classify the various techniques of interpolation and approximation.	
CO4	Compute the integration and differentiation problems.	
CO5	Determine the various methods to solve ordinary differential equations	
Course Name: Algebraic Number Theory		Course Code: P16MAE5C
	Upon Completion of the course Students would be able to	
CO1	Explain the concepts of divisibility, Congruence's.	
CO2	Understand the techniques of numerical calculations of prime power moduli, using congruence's.	
CO3	Understand the ideas of quadratic residues and quadratic reciprocity.	
CO4	Study about the concepts of binary quadratic forms.	
CO5	Acquire the knowledge of Diophantine Equations.	
Course Name: PROJECT WORK		Course Code: P16MAPW
	Upon Completion of the course Students would be able to	
CO1	Helps to understand deep knowledge in particular area of research.	
CO2	Helps the students to learn how to collect articles and how to write dissertation.	
CO3	How to design research experiments.	
CO4	How to analysis the data statistically.	
CO5	How to prepare reports for presentation in conferences and seminars.	

HOD

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THANJAVUR - 613 005.

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT, THANJAVUR-5
PG& RESEARCH DEPARTMENT OF NUTRITION AND DIETETICS

Attainment of Programme Outcomes and Course Outcomes

	PROGRAMME OUTCOME(M.Sc FSMD)
PO 1	Understand the core knowledge of Food Service Management and Dietetics in-depth
PO 2	Able to apply concepts and counsel dietary management in the treatment of diseases.
PO 3	Capable to develop and evaluate unique health food products to foster healthy society.
PO 4	Manage and administrate dietaries and food service outlets effectively
PO 5	Become a successful professional, entrepreneur and researcher.

COURSE NAME:ADVANCE FOOD SCIENCE	COURSE CODE:P16FS11
	Upon Completion of the Course Students would be able to
CO 1	Gain knowledge on source and properties of food
CO 2	Develop skills to judje the quality of cooked foods
CO 3	Understand the principles and chemistry of foods.
CO 4	Apply the principles while preparing and cooking
CO 5	Comprehend knowledge on the characteristics and properties of foods in cooking

COURSE NAME: NUTRITION THROUGH LIFE SPAN	COURSE CODE: P16FS12
	Upon Completion of the Course Students would be able to
CO 1	Understand the importance of nutrition and health
CO 2	Comprehend the basic aspects of meal planning
CO 3	Obtain knowledge on the nutritional needs pertaining to different stages of life.
CO 4	Plan diet for various age groups.
CO 5	Know the nutrition related problems in life.

COURSE NAME: CLINICAL BIOCHEMISTRY	COURSE CODE: P16FS13
	Upon Completion of the Course Students would be able to
CO 1	Understand the metabolism of the nutrients and the associated diseases
CO 2	Know the organ specific function tests associated with the disease
CO 3	Comprehend the role of hormone in health.
CO 4	Understand the diferent evaluation of organ function tests.
CO 5	Obtain knowledge on different disordes in human body.

COURSE NAME:FOOD SERVICE MANAGEMENT COURSE	CODE:P16FS14
	Upon Completion of the Course Students would be able to
CO 1	Gain knowledge in principles of Management
CO 2	Develop skills in organizing and establishing food service Institution
CO 3	Uderstand the organization and management of food service institution
CO 4	Gain knowledge anout the food service system
CO 5	Gain knowledge anout the Responsibilities in food service .

COURSE NAME:DIETETICS	COURSE CODE:P16FS21
	Upon Completion of the Course Students would be able to
CO 1	Learn, analyse and apply the nutrition care process and therapeutic dietary approach
CO 2	Understand the aetiology, physiologic and metabolic anomalies of acute and chronic diséases and patient needs
CO 3	Know the effect of various diseases on nutritional status and nutritional and dietary requirements.
CO 4	Develop aptitude for taking up dietetics as a profession
CO 5	Develop capacity and aptitude for taking up dietetics as a profession

COURSE NAME: FOOD MICROBIOLOGY AND SANITATION	COURSE CODE:P16FS22
	Upon Completion of the Course Students would be able to
CO 1	Understand the microorganisms related foods

COURSE NAME:MANAGEMENT AND ACCOUNTING IN HOSPITALITY INDUSTRY	COURSE CODE:P16FS42
	Upon Completion of the Course Students would be able to
CO 1	Gain knowledge on various sources of finance
CO 2	Know the accounting tools used by the business office
CO 3	Understand the main functions of the marketing and sales
CO 4	Find out the factors that influence food and beverage cost.
CO 5	Gain knowledge on marketing communication

COURSE NAME: COUNSELLING SKILLS	COURSE CODE:P16FSE5
	Upon Completion of the Course Students would be able to
CO 1	Understand the principles and procedures of nutrition counselling
CO 2	Understand the role of the counsellor
CO 3	Dvelop an understanding in lifestyles in influence on health and well-being
CO 4	Effects of acute and chronic diseases on the emotional and psychological state.
CO 5	Understand the behaviour of the individuals .

COURSE NAME:CLINICAL BIOCHEMISTRY(PRACTICALS)	COURSE CODE:P16FS15P
	Upon Completion of the Course Students would be able to
CO 1	Acquire skills on preparation ofsolutions
CO 2	Colorimetric estimation ofbiochemical molecules
CO 3	Acquire the skills on analysis ofblood and urine samples
CO 4	Understand the principles ofbiochemical methods and be able touse them with appropriateinstruction.
CO 5	Understand the basis of reactivityof biologically relevant moleculesand their interactions.

COURSE NAME:DIETETICS PRACTICALS AND DIETETARY INTERNSHIP	COURSE CODE:P16FS23P
	Upon Completion of the Course Students would be able to
CO 1	Develop skills in planning, calculating, modifying the nutrient requirements and in preparation of therapeutic diets
CO 2	Acquire skills in diet counsellingand feeding of patients
CO 3	Analyse the food habits and bringabout the dietary changes
CO 4	Gain experience to plan andcalculate the modified diet
CO 5	Acquire skill to supervise and handle the food preparation and service in the dietary department of the hospital.

COURSE NAME:QUANTITY FOOD PRODUCTION AND SERVICE PRACTICALS	COURSE CODE:P16FS33P
	Upon Completion of the Course Students would be able to
CO 1	Develop knowledge about Quantity food cooking
CO 2	Gain experience to standardize therecipes and to calculate the cost peryield.
CO 3	Select appropriate purchasing procedures andissuing
CO 4	Competent to prepare Indian and continentalcuisines
CO 5	Standardise recipes for different cuisines at alarge scale

COURSE NAME: CATERING INTERNSHIP	COURSE CODE: P16FS43P
	Upon Completion of the Course Students would be able to
CO 1	Acquire skill to plan, compile andprepare meals based on the differentregion
CO 2	Understand the basic principles ofmanagement in food service units
CO 3	Update the skills and techniquesin starting up a food service unitsuccessfully.
CO 4	Aware about of the renewablesources of energy in food serviceindustry
CO 5	The graduate will be able to handle unique challenges faced in Hospitality Industry

COURSE NAME: PROJECT WORK		COURSE CODE:P16FSPW
	Upon Completion of the Course Students would be able to	
CO 1	Carry out a substantial research-based project	
CO 2	Demonstrate capacity to lead and manage change through collaboration with others	
CO 3	Comprehend the different types of research andvarious tools of data collection.	
CO 4	Perform Statistical analysis and Interpret and justify the research findings	
CO 5	Design, execute and document a research	

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT, THANJAVUR-5

PG AND RESEARCH DEPARTMENT OF NUTRITION AND DIETETICS

Attainment of Program outcomes and Course Outcomes

PROGRAM OUTCOMES (BSc N&D)

PO1	Utilize knowledge from the physical and biological sciences as a basis for understanding the role of food and nutrients in health and disease processes
PO2	Provide nutrition counseling and education to individuals, groups, and communities throughout the lifespan using a variety of communication strategies
PO3	Apply technical skills, knowledge of health behavior, clinical judgment, and decision-making skills when assessing and evaluating the nutritional status of individuals and communities and their response to nutrition
PO4	Students will utilize advanced principles of health literacy, including critical thinking skills, literature searches, data collection and interpretation, necessary for the implementation of food and nutrition
PO5	Implement strategies for food access, procurement, preparation, and safety for individuals, families, and communities

COURSE NAME: FOOD SCIENCE	COURSE CODE: 16SCCND1
Upon Completion of the Course Students would be able to	
CO1	Obtain knowledge of different food groups,their comnposition and their role in diet
CO2	Study different methods of cooking foods
CO3	Understand the major chemicalreactions that occur during foodpreparation and storage
CO4	Obtain knowledge about the nutrients present in foods
CO5	Able to describe the techniquesthat can be used to monitor quality ofraw ingredients and final products.

COURSE NAME: FOOD MICROBIOLOGY	COURSE CODE:16SACND1
Upon Completion of the Course Students would be able to	
CO1	Acquire an elementary knowledge and understand the revelance of microscopy and its application
CO2	Develop an understanding of the role of micro organisms in food industry and in health maintanence
CO3	Know about the spoilage andfactors affecting the growth ofmicroorganisms in food
CO4	Impart the knowledge about therole of micro-organisms infermentation of foods
CO5	Aware about hygiene andsanitation in food industry

COURSE NAME: HUMAN PHYSIOLOGY	COURSE CODE:16SCCND2
Upon Completion of the Course Students would be able to	
CO1	Gain knowledge on parts of thebody and its diseases and disorders.
CO2	Plan diet towards the therapeuticapproaches of the diseases.
CO3	Gain knowledge on differenttissues, muscles and organs of thebody
CO4	Obtain a better understanding of the principles of nutrition through the study of physiology
CO5	Appreciate the importance of hormonal and nervous reglations of the body

COURSE NAME: FOOD CHEMISTRY	COURSE CODE: 16SACND2
Upon Completion of the Course Students would be able to	
CO1	Gain insight into Chemistry of foods
CO2	Understand the Scientific principles involved in food preparation
CO3	Develop the scientific attitude ofthe students towards the principle offood chemistry
CO4	Study the physico-chemicalchanges occurring in foods duringcooking
CO5	to know about novel product development and value addition of foods

COURSE NAME: PRINCIPLES OF NUTRITION	COURSE CODE:16SCCND3
Upon Completion of the Course Students would be able to	
CO1	Educate others about holisticNutrition, life style ,wellness andhealthy living
CO2	Design and critique evidencebased nutrition intervention forprevention and control of chronicdiseases
CO3	Gain basic knowledge of the different nutrients
CO4	Get insight into the role of nutrients in maintaining health of the individual
CO5	Understand the interrelationship of the various nutrients.

BHARATH COLLEGE OF SCIENCE AND MANAGEMENT Near New Bus Stand THANJAVUR-5

COURSE NAME: FUNDAMENTALS OF BIOCHEMISTRY		COURSE CODE:16SACND1
	Upon Completion of the Course Students would be able to	
CO1	Capable of describing biochemicalpathways relavent in nutrientmetabolism	
CO2	Capable of using selectedbiochemical techniques that arerelavent for the investigation of the nutrient metabolism	
CO3	Capable of using selectedbiochemical techniques relavent innutritional biochemical research	
CO4	Provide nutritional advice basedon sound scientific findings	
CO5	Critically evaluate and applycurrent scientific findings inNutrition and Health	

COURSE NAME:NUTRITION THROUGH LIFE CYCLE		COURSE CODE:16SCCND4
	Upon Completion of the Course Students would be able to	
CO1	Understand the importance of nutrition and health	
CO2	Obtain knowledge on the nutritional needs pertaining to different stages of life	
CO3	Plan diet for various age groups.	
CO4	Understanding the nutritionalrequirements through the life cycle	
CO5	Practically gain knowledge to plandiet for each stage of life accordingto the guidelines for dietary needs	

COURSE NAME: BASIC FOOD PROCESSING AND PRESERVATION		COURSE CODE:16SACND4
	Upon Completion of the Course Students would be able to	
CO1	Students are able to understand thebasic knowledge relating to foodsafety and principles of preservation.	
CO2	Students will understand the	
CO3	Equip the students to gain basicknowledge relating to the principlesof baking	
CO4	Introduce them to the techniques ofcake and pastry making	
CO5	Understand to describe propertiesand functions of the basic ingredientsused in baked goods	

COURSE NAME:DIETETICS-I		COURSE CODE:16SCCND5
	Upon Completion of the Course Students would be able to	
CO1	Understand the basic principles ofDiet and diet therapy	
CO2	Acquire the knowledge ofmodifications of normal diet fortherapeutic purposes	
CO3	Comprehend the feeding techniques	
CO4	Know the corrective measures in malnutrition.	
CO5	Develop skills and techniques in the planning and preparation of therapeutic diets	

COURSE NAME: FOOD SERVICE MANAGEMENT-I		COURSE CODE:16SCCND6
	Upon Completion of the Course Students would be able to	
CO1	Gain knowledge about various types of food services	
CO2	Gain knowledge about the Principles and functions of Management	
CO3	To understand about personnel Management, financial management and legal aspects of catering.	
CO4	To realise the importance of sanitation and hygiene in food service institutions.	
CO5	Perform training andcommunication skills relevant to therestaurant, food industry etc	

COURSE NAME:BAKERY AND CONFECTIONARY		COURSE CODE:16SCCND7
	Upon Completion of the Course Students would be able to	
CO1	Understand the importance of baking and confectionery	
CO2	Understand the principles, role of various food components involved in baking and confectionery	
CO3	Develop skills and responsibility for setting up bakery and confectionery units	
CO4	Students are able to understand thebasic knowledge relating to foodsafety and principles of preservation	
CO5	Students will understand theconcept of processing andpreservation of fruits and vegetables	

COURSE NAME: FOOD STANDARDS AND QUALITY CONTROL		COURSE CODE:16SMBEND1
	Upon Completion of the Course Students would be able to	
CO1	Gain knowledge about physio – chemical changes in foods.	
CO2	Gain knowledge on sources, uses, properties and changes in starches, sugars, proteins and browning reactions	
CO3	Gains knowledge on theimportance of quality assurance infood industry	
CO4	Gain knowledge about proteins in foods, flavour and aroma, Common food adulterants and toxins and enzymes	
CO5	Thorough knowledge on various tests and quality assessment, using standards for quality assessment and food safety.	

COURSE NAME: DIETETICS-II		COURSE CODE:16SCCND8
	Upon Completion of the Course Students would be able to	
CO1	Understand the pathology of metabolic diseases, cardiovascular and renal diseases and their dietary modification	
CO2	Appreciate the nutritional care in surgery and allergy	
CO3	Develop diet formulations for HIV and cancer	
CO4	Know the metabolic condition ofthe life style related diseases	
CO5	Explain the risk factors for degenerative diseases and toward the management of the several disease conditions	

COURSE NAME:FOOD SERVICE MANAGEMENT-II		COURSE CODE:16SCCND9
	Upon Completion of the Course Students would be able to	
CO1	To enable the students to gain knowledge on systems, types and styles of food service in catering establishments.	
CO2	Gain knowledge in handling equipments and their maintenance	
CO3	Gain knowledge on ideal food service layout.	
CO4	Assess leadership, supervisory andhuman relation skills within therestaurant and food service Industry	
CO5	Perform training andcommunication skills relevant to therestaurant, food industry etc	

COURSE NAME: COMMUNITY NUTRITION		COURSE CODE:16SMBEND2
	Upon Completion of the Course Students would be able to	
CO1	Gain insight into the national nutritional problems and their implications	
CO2	Appreciate the national and international contribution towards nutrition improvement in India	
CO3	Understand the importance of nutrition education	
CO4	Develop skills in organizing and evaluating nutrition projects in the community	
CO5	Assess the nutritional status of thecommunity	

COURSE NAME:FOOD SCIENCE (PRACTICALS)		COURSE CODE:16SCCND1P
	Upon Completion of the Course Students would be able to	
CO1	Understand the significance of diverse food groups in relation to health	
CO2	Understand different food groups, their nutritive value and role in day's die	
CO3	Gain hands on skills through different recipes and various cooking methods	
CO4	Understand the concept of food selection based on nutrient sources	
CO5	Developing skills to calculate nutritive value for selected foods	

COURSE NAME:HUMAN PHYSIOLOGY (PRACTICALS)		COURSE CODE:16SCCND1P
	Upon Completion of the Course Students would be able to	
CO1	Identify different tissues and organs of different systems of human body	
CO2	Effectively use the microscope for microscopic study of various tissues	
CO3	Explain the gross morphology, structure and functions of variousorgans of human body.	
CO4	Perform the haematological test like blood cell count, haemoglobin estimation, bleeding/clotting time, blood group determination, etc.	
CO5	Record the blood pressure, heart rate and pulse rate	

COURSE NAME: FOOD MICROBIOLOGY (PRACTICALS)		COURSE CODE: 16SACND1P
	Upon Completion of the Course Students would be able to	
CO1	Understand the significance and activities of microorganisms in various food and role ofintrinsic and extrinsic facto	
CO2	Understand the beneficial role of microorganisms in food processing	
CO3	Study the different types of microorganisms in milk and their activities - fermented dairyproducts and spoilage	
CO4	Understand the significance and activitieson microbial growth in foods leading to spoilage, andunderstand the prir	
CO5	Recognize and describe the characteristics of important food borne pathogens	

COURSE NAME- FOOD CHEMISTRY (PRACTICALS)	COURSE CODE 16SACND1P
	Upon Completion of the Course Students would be able to
CO1	Be able to control the major chemical/biochemical (enzymatic) reactions that influence
CO2	Demonstrate the properties of different food components
CO3	Interactions among thesecomponents modulate the specific quality attributes of food systems
CO4	Understand the principles that underlies the biochemical/enzymatic techniques used in
CO5	Study the effects of Acids,alkali,heat on water soluble and fat soluble pigments

COURSE NAME PRINCIPLES OF NUTRITION (PRACTICALS)	COURSE CODE 16SCCND2P
	Upon Completion of the Course Students would be able to
CO1	Understand the vital link between nutrition and health
CO2	Gain knowledge on functions, metabolism and effects of deficiency of nutrients
CO3	Understand the techniques of estimating micro nutrients
CO4	Understand the nutritional demands in various food and nutrients
CO5	Helps to understand the Prepartion and serving the planned menu for men and women of different occupations.

COURSE NAME: NUTRITION THROUGH LIFE CYCLE (PRACTICALS)	COURSE CODE:16SCCND2P
	Upon Completion of the Course Students would be able to
CO1	To define the nutritional needs of each age groups
CO2	To co-relate the physiological and psychological changes adhering to all the
CO3	To understand the importance of nutrition and health.
CO4	To interpret the nutritional problems pertaining to different age groups
CO5	To understand the techniques of estimating micro nutrients.

COURSE NAME:FUNDAMENTALS OF BIOCHEMISTRY (PRACTICALS)	COURSE CODE:16SACND2P
	Upon Completion of the Course Students would be able to
CO1	To ensure students to understand and gain theory and practical knowledge of Chemistry
CO2	To provide practical laboratory training in the estimation of various
CO3	To contrast the values of estimation with normal condition
CO4	To acquires skills in using laboratory instruments.
CO5	To apply the principles to estimate various parameters in blood and urine

COURSENAME: BASIC FOOD PROCESSING AND PRESERVATION (PRACTICALS)	COURSE CODE:16SACND2P
	Upon Completion of the Course Students would be able to
CO1	Know the recent concepts of food processing
CO2	Choose appropriate foods processing
CO3	Relate the theoretical knowledge of processing technique with foodproducts development
CO4	Understand the relevance of processing for various food commodities
CO5	To understand the process of fortification and enrichment of foodproducts

COURSE NAME: DIETETICS-I (PRACTICALS)	COURSE CODE:16SCCND3P
	Upon Completion of the Course Students would be able to
CO1	Understand the basic principles ofdiet and diet therapy.
CO2	Acquire the skills and techniques involved in the planning and preparation of therapeutic diets for various ailments.
CO3	Acquire the knowledge ofmodifications of normal diet fortherapeutic purposes.
CO4	Gain experience to plan andcalculate the modified diet
CO5	Develop the capacity and attitudefor taking dietetics as a profession.

COURSE NAME:DIETETICS-II(PRACTICALS)	COURSE CODE:16SCCND4P
	Upon Completion of the Course Students would be able to
CO1	Apply the principles of diet for themanagement of metabolic diseases.
CO2	Acquire skills to plan a diet formetabolic diseases based on thedietary modification
CO3	Use the nutrition care process forspecial conditions like allergy andburns.
CO4	Evaluate the related food sourcefor the special conditions.
CO5	Evaluate the patient's medicalrecords and interpret their medicalhistory related to the conditions.

COURSE NAME: DIETETARY INTERNSHIP		COURSE CODE: 16SMBEN03P
	Upon Completion of the Course Students would be able to	
CO1	Integrate theory and practice andAssess interests and abilities in their field of study.	
CO2	Develop work habits and attitudes necessary for job success .	
CO3	Acquire employment contacts leading directly to a full-time job following graduation from college.	
CO4	Learns about the patient's medicalrecords and interpret their medicalhistory related to the conditions.	
CO5	Develop communication, interpersonal and other critical skills in the job interview process.	

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BHARATH COLLEGE OF SCIENCE AND MANAGEMENT
(UGC Recognized 2(f) & 12(B) Institution)
THANJAVUR-5
PG DEPARTMENT OF COMPUTER SCIENCE
M.Sc COMPUTER SCIENCE - PROGRAM OUTCOME

PO1	Get core competence in various subjects of Computer Science.
PO2	Provides mathematical foundations, fundamental concepts, methods, algorithms and principles with various strategies to develop professional software development skills.
PO3	Develops the skills in different applications, tools and technologies.
PO4	Understands how to build and architect the real world applications.
PO5	Provides technology-oriented with knowledge and ability to develop creative solution.

M.Sc COMPUTER SCIENCE - COURSE OUTCOME

COURSE NAME: WEB TECHNOLOGIES	COURSE CODE : P16CS12
Upon Completion of the course student will able to	
CO1	Understanding the fundemental concepts of Internet.
CO2	Understanding the concepts of JavaScript.
CO3	Understanding about the concepts of XML.
CO4	Provides the fundamentals of JSP.
CO5	Understanding the concepts of ASP with a view to developing professional software development skills.

COURSE NAME : DESIGN & ANALYSIS OF ALGORITHM	COURSE CODE : P16CS13
Upon Completion of the course student will able to	
CO1	To study the concepts of algorithms and analysis of algorithms.
CO2	Understanding the concepts of analysis of algorithm using divide & conquer method.
CO3	Describes the concepts of analysis of algorithm using greedy method.
CO4	Understanding the concepts of analysis of algorithm using dynamic programming method.
CO5	Understanding the concepts of analysis of algorithm using backtracking and branch & bound techniques.

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COURSE NAME: DISTRIBUTED OPERATING SYSTEM		COURSE CODE: P16CS14
Upon Completion of the course student will able to		
CO1	To know about the concepts of distributed operating systems.	
CO2	Understanding about message passing, encoding and decoding, group communication.	
CO3	Understanding the concepts of Distributed shared memory and synchronization	
CO4	To know about the Distributed File system.	
CO5	To understand about the concepts of cryptography.	

COURSE NAME : WEB TECHNOLOGIES LAB		COURSE CODE: P16CS15P
Upon Completion of the course student will able to		
CO1	Know about the fundamental concepts of Internet.	
CO2	Develop and implement the codes in XML	
CO3	Develop and implement the codes in Java Script.	
CO4	Develop and implement the codes in JSP.	
CO5	Develop and implement the codes in ASP different components, objects, connecting and storing in database .	

COURSE NAME : OOAD AND UML		COURSE CODE : P16CS21
Upon Completion of the course student will able to		
CO1	To give detailed knowledge on Structured approach to system construction.	
CO2	To Know about various object oriented methodologies.	
CO3	Understanding about object oriented analysis.	
CO4	Understanding the concepts of object oriented design.	
CO5	To impart knowledge in UML and architectural models from real world problems.	

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COURSE NAME : DISTRIBUTED TECHNOLOGIES	COURSE CODE : P16CS22
Upon Completion of the course student will able to	
CO1	Understanding distributed Computing, Challenges and Strategies involved in establishing remote connection, Distributed computing practices through Dot Net and Java technologies.
CO2	Describes Advanced ADO, NET, Disconnected Data Access, Gridview, Details View, Form View controls, Crystal Reports, Applications.
CO3	Understanding Advanced ASP.NET, Uses of these controls and features in Website development.
CO4	Describes ASP.NET, Security in ASP, NET, State Management in ASP, NET, Mobile Application development in ASP, NET, Critical usage of these features in Website development.
CO5	Understanding Web services, WSDL, UDDI, SOAP concepts, Connected a Web Service to a Data Base.

COURSE NAME : DISTRIBUTED TECHNOLOGIES LAB	COURSE CODE: P16CS23P
Upon Completion of the course student will able to	
CO1	Develop the fundamental concepts of Internet, Javascript, XML, JSP, ASP.
CO2	Implement several webserver controls in database using ASP.NET.
CO3	Genereate Crystal Report from an existing database.
CO4	Design the web page using AdRotator, Image map, Multiview controls and Master pages.
CO5	Establish the security features, manage the concepts of mobile applications and also the web servers.

COURSE NAME: MOBILE COMMUNICATION	COURSE CODE : P16CSE1A
Upon Completion of the course student will able to	
CO1	Understanding the needs for mobile computing, wireless transmission, spread spectrum and cellular systems and medium access control.
CO2	To gain knowledge in Telecommunication System.
CO3	Understanding the concepts of wireless LAN.
CO4	To know about Mobile IP.
CO5	To Impart knowledge on wireless application protocol.

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COURSE NAME : EMBEDDED SYSTEMS	COURSE CODE : P16CSE2A
Upon Completion of the course student will able to	
CO1	Introducing the embedded systems, structural units in a processor, memory devices, memory allocation.
CO2	Understanding about the device drivers, interrupt servicing mechanisms, programming concepts in C, C++, Java, Macros and functions, loops and pointers
CO3	Describes the program modeling concepts in single and multiprocessor systems, developments process.
CO4	Understanding about the real time operating systems, interrupt routines in RTOS environment, performance metrics in scheduling models.
CO5	Provides Hardware software code design, design cycle, use of software tools for development, use of scopes and logic analysers for system hardware tests and issues.

COURSE NAME : DATA MINING AND WAREHOUSING	COURSE CODE : P16CS31
Upon Completion of the course student will able to	
CO1	Understanding the Functionalities, Issues, Social Implications, Applications and Trends in Data mining, Data Warehouses.
CO2	Describes about the Data Preprocessing,Various methods in Data Cleaning Algorithms.
CO3	Explains the Clustering, Types of Algorithms, Association rule & methods.
CO4	Understanding the Data Warehousing, Data marts , OLTP & OLAP systems.
CO5	Understanding the Developing tools, Architectural strategies and organizational issues in data warehouse, Data content, Meta data.

COURSE NAME: COMPILER DESIGN	COURSE CODE : P16CS32
Upon Completion of the course student will able to	
CO1	Understands the different phases of compiler and needs of the compiler.
CO2	Describes about symbol table entries, syntax analysis, writing the context free grammar, techniques of parsing.
CO3	Understanding the construction of syntax trees, S & L - attribued definitions, type checking.
CO4	Describes the runtime environment, storage organizations, storage allocation strategies, Intermediate code generations.
CO5	Understanding the concepts of Issues in design of code generator, target machine & code optimization.

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COURSE NAME : DATAMINING LAB		COURSE CODE: P16CS33P
Upon Completion of the course student will able to		
CO1	Get hands on experience in developing applications using data mining tool.	
CO2	Implement Preprocessing for Data type Conversinh and Data Transformation.	
CO3	Implement Feature Selection by Filter, Wrapper and dimensionally Reduction.	
CO4	Implement Supervised Technique - Classifier and Unsupervised Technique - Clustering algorithms.	
CO5	Implement Association Rule, Experimenter and knowledge flow for feature selection and classification and clustering	

COURSE NAME: PERVASIVE COMPUTING		COURSE CODE : P16CSE3C
Upon Completion of the course student will able to		
CO1	Understanding the basic concepts of pervasive computing.	
CO2	To gain knowldege on device technology.	
CO3	Understanding about Device connectivity.	
CO4	Understanding the concepts of WAP fundamentals.	
CO5	To learn about PDA.	

COURSE NAME : NETWORK SECURITY		COURSE CODE : P16CSE4A
Upon Completion of the course student will able to		
CO1	Understanding , Symmetric Ciphers: Classical Encryption Techniques.	
CO2	Understanding , Block ciphers and the Data Encryption Standards, Public-key Encryption and Hash Functions , Public-Key Cryptography and RSA.	
CO3	Understanding , Network Security Practices , Authentication applications, Electronic Mail Security.	
CO4	Describes, Network Security Practices, IP Security, Web Security.	
CO5	Understanding , System Security: Intruders , Malicious Software , Firewall	

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COURSE NAME : CLOUD COMPUTING		COURSE CODE : P16CS41
Upon Completion of the course student will able to		
CO1	Understanding the Layers, Features, Types, Seven step model, SaaS, Integration Scenarios , Methodologies , The Enterprise Paradigm.	
CO2	Describes about the Migration Services, Infrastructures, Design types, Cloud Storage ,Technologies, Challenges.	
CO3	Explains the Technologies and Tools, Aneka Cloud Platform, Hybrid Cloud Implementation – CometCloud.	
CO4	Introduction – Enterprise Demand, Dynamic ICT Service , Quality and Security, Data Centre Producing Business, The MapReduce Programming	
CO5	Understanding the Principles, A Federated Cloud Computing Model, Security Considerations, SLA, SLO Management, HPC on CloudsGrid.	

COURSE NAME : WIRELESS SENSOR NETWORKS		COURSE CODE : P16CS42
Upon Completion of the course student will able to		
CO1	Understanding the challenges for Wireless Sensor, Networks, Enabling Technologies for Wireless Sensor Networks.	
CO2	Provides the Single Node Architecture, Hardware Components, Energy Consumption of Sensor Nodes, Operating Systems and Execution Environments, Network Architecture.	
CO3	Describes the Mediation Device Protocol,Wakeup Radio Concepts, Assignment of MAC Addresses, Routing Protocols Energy-Efficient Routing, Geographic Routing.	
CO4	Understanding the Topology Control, Clustering, Time synchronization, Localization and Positioning, Sensor Tasking and Control.	
CO5	Describes the Sensor Node Hardware, Berkeley Motes, Node-level Simulators, State-centric programming.	

COURSE NAME : OPEN SOURCE LAB		COURSE CODE: P16CS43P
Upon Completion of the course student will able to		
CO1	Develop the fundamental concepts of Internet, Javascript, XML, JSP, ASP.	
CO2	Implement the server side PHP program to display details of students from a HTML form.	
CO3	Implement the PHP program that adds products that are selected from a web page to Shopping cart.	
CO4	Implement the PHP program to access the data stored in MySQL data source.	
CO5	Implement the shell program to find the details of an user session and to change the extension of a given file.	

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COURSE NAME: DIGITAL IMAGE PROCESSING		COURSE CODE : P16CSE5C
Upon Completion of the course student will able to		
CO1	To study about the various concepts, methods and algorithms of digital image processing.	
CO2	To gain knowledge in Image transforms.	
CO3	To impart knowledge on Image enhancement.	
CO4	Understanding the concepts of Image restoration.	
CO5	To gain knowledge in Image data compression and image reconstruction from projections.	

COURSE NAME : PROJECT WORK		COURSE CODE: P16CSPW
Upon Completion of the course student will able to		
CO1	Enable the students to develop a project with a latest technologies and trained as a software professional skills.	
CO2	Plan, Analyse, design, implement and apply various types of testing.	
CO3	Communicate effectively in both oral and writing.	
CO4	Learn about different software development process models and the different features of software for their selected problem.	
CO5	Know about recent tools and technologies in software industry and also the scope their specialized areas in different fields in the industry.	

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Department of Physics

PROGRAM OUTCOME

PO1	To undestand the fundamentals of laws, principles and concepts.
PO2	To understand the structure, characterities of various physical phenomena and their properties.
PO3	An ability to design analysis of circuit and interrupt data, testing of different electronics components and circuits.
PO4	To understand the implementation, Analysis fundamental process to recognizing experimental applying relevant laws to this problems.
PO5	The course built a foundation of various applied field and technology to enhance the student accordance ability & personal quality transferrable skill.

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Department of Physics

COURSE NAME: PROPERTIES OF MATTER AND ACOUSTICS	COURSE CODE: 16SCCPH1
	Upon Completion of the Course Students would beable to
CO1	Study the different modulus of elasticity and determine the rigidity modulus and moment of inertia.
CO2	To understand the expression for bending moment and determination of youngs modulus.
CO3	To understand the experimental study of surface tension and variation of surface tension.
CO4	To understand the fundamental process of Newtons law and recognizing mayers formula to this problems.
CO5	To study the factors affecting the acoustics of building.

COURSE NAME: MECHANICS	COURSE CODE:16SCCPH2
	Upon Completion of the Course Students would beable to
CO1	To understand the fundamentals laws of impact,particle projected in any direction&concept of Direct&oblique impact.
CO2	To understand the expression for normal acceleration&variation of g with altitude,latitude and depth.
CO3	To understand the determine the Newton's law of gravitation and analysis of gravitational potential and field.
CO4	To understand laws of friction,fundamental process of moment of inertia recognizing Kater's pendulum.
CO5	The course foundation of centre of gravity in accordance with atmospheric pressure.

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COURSE NAME: Thermal physics		COURSE CODE:16SCCPH3
Upon Completion of the Course Students would beable to		
CO1	Learn fundamental laws, specific heat of matter.	
CO2	Known about Laws of heat, properties of metals and uses conclusion of heat.	
CO3	Learn Laws of Radiation, Experiment, conclusion of temperature of sun, uses of solar energy.	
CO4	Principles of law Temperature, experimental, application of law temperature, cooling energy	
CO5	Laws of Thermodynamics, change of reversible and irreversible processes, Thermodynamical relations.	

COURSE NAME: ELECTRICITY,MAGNETISM AND ELECTROMAGNETISM		COURSE CODE:16SCCPH4
Upon Completion of the Course Students would beable to		
CO1	Coulombs law, Gauss's Law, Principle of Capacity and Loss of Energy Calculation	
CO2	Critical Law,Kirchhoff's Law,Calibration of Ammeter and Voltmeter	
CO3	Laws of Electromagnetic indution,Self and Mutual indution Decay of Current in a circuit	
CO4	Series Circuit,Q-factor Calculation, Power in AC Circuits and Ueses of Transformers	
CO5	Propertites of magnetic matrial ,Energy loss due to magnetic.	

COURSE NAME: Optics		COURSE CODE:16SCCPH5
Upon Completion of the Course Students would beable to		
CO1	Study different types of Spherical aberration and Chromatic aberration in a lens	
CO2	Fundamental of Stationary waves and its applications of interference	
CO3	To study differentiate Fresnel's diffraction and Fraunhofer diffraction.	
CO4	To understand fundamental process of double image polarizing prism and experimental of Laurent's half shade polarimeter	
CO5	To understand various types of Eyepieces and accordance with microscope and Telescope.	

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COURSE NAME: Atomic and Molecular physics		COURSE CODE:16SCCPH6
Upon Completion of the Course Students would beable to		
CO1	Study properties of rays, production, charge calculation by experimental.	
CO2	Fundamental of atom, structure,principles and effect of expeiments.	
CO3	Production and detection of x-rays, Laws of x-rays and characteristics of x-rays.	
CO4	Properities of metals, photo electric effect, experimental arrangement and verification, applications.	
CO5	LASER properties, concepts, experimental and applications.	

COURSE NAME: ELECTRONICS		COURSE CODE:16SCCPH7
Upon Completion of the Course Students would beable to		
CO1	To understand the features of semiconductor and zener diode and their fundamental concepts	
CO2	Design different types of oscillator.	
CO3	Understand the working of basic gates.	
CO4	Choose flip flop for a particular application.	
CO5	Design operational amplifier circuits and to analyse their properties.	

COURSE NAME: MATRIAL SCIENCE		COURSE CODE: 16SMBEPH1
Upon Completion of the Course Students would beable to		
CO1	To understand the types of Crystals and struture	
CO2	To Understand the Superconductivity,types of superconductor and applications	
CO3	To Known Nonotecchnology,Properties and applications.	
CO4	To understand the different types material and its applications.	
CO5	To nuderstand the Mechanical Behavior of Matrials.	

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COURSE NAME: Nuclear physics	COURSE CODE:16SCCPH8
Upon Completion of the Course Students would beable to	
CO1	The basic nuclear properties, Nuclear models
CO2	Radioactive decay law, types of decay and properties of neutrino.
CO3	Describe particle detectors and accelerators.
CO4	Nuclear reactions, conservation laws, Q-value calculations, Nuclear reactor.
CO5	Elementary particles, conservation laws, Quark model.

COURSE NAME: Theoritical Physics	COURSE CODE:16SCCPH9
Upon Completion of the Course Students would beable to	
CO1	Study fundamental laws, Conservation theorem and Symmetry properties.
CO2	To understand the characteristics of generalized momentum and Cyclic co-ordinate.
CO3	To understand experimental study of matter waves and Debroglie relation.
CO4	To understand the development of Schrodinger wave equation and properties of wave function
CO5	To study the foundation of Quantum system.

COURSE NAME: MICROPROCESSOR AND C* PROGRAMMING	COURSE CODE: 16SMBEPH2
Upon Completion of the Course Students would beable to	
CO1	To understand the made on the memory and Basic components of computer
CO2	To understand the architecture and basic instructions of 8085
CO3	Write assembely language for the microprocessor intel 8085
CO4	To understand the basic structure of C and varibles,constant
CO5	To under stand the basic instruction and branch statements

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COURSE NAME: Communication Physics		COURSE CODE: 16SMBEPH3
Upon Completion of the Course Students would beable to		
CO1	To Understand the Radio transmission and reception.	
CO2	To Understand the Fiber Optic Communication.	
CO3	To Understand the Radar Communication.	
CO4	To Understand the Satellite Communication.	
CO5	To Understand the Mobile Communication.	

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Department of Physics

PROGRAM OUTCOME FOR PRACTICAL	
PO1	To find this course introduces to the methods of experimental physics.
PO2	An ability will be given on laboratory techniques such as accuracy of measurements& Data analysis.
PO3	To calculateabasic experimental apparatus common to the study of physical phenomena.
PO4	To measure the interrelations between theory and observation the tole of systematic and random experimental errors and methods used to analyze experimental uncertainity and compare experiment with theory.
PO5	To communicate scientific ideas effectively both orally and in writing.

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Department of Physics

COURSE OUTCOME

Course Name: MAJOR PRACTICAL-I	Course Code: 16SCCPH1P
Upon Completion of the Course Students would be able to	
CO1	To find the young's modulus of materials.
CO2	To determine the heat capacities of liquids and solids.
CO3	To calculate viscosity and surface tension of liquids from measurements.
CO4	To measure simple electrical and magnetic quantities such as voltage,current,resistance,earth's magnetic field.
CO5	To realize the formation of spectrum with prism and grating.

Course Name: MAJOR PRACTICAL-II	Course Code: 16SCCPH2P
Upon Completion of the Course Students would be able to	
CO1	To analyse the spectral lines using prism.
CO2	To convert the galvanometer into millimetre and millivolt meter and calibrate.
CO3	To determine capacitances and inductances using various bridge circuits.
CO4	To find wavelength of monochromatic light by forming Newton's rings.
CO5	To determine the pH,solubility and density of precursor solutions.

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Course Name: MAJOR PRACTICAL-III	Course Code: 16SCDPR3
Upon Completion of the Course Students would be able to	
CO1	To find the refractive index value
CO2	To determine the value of M,E,MF,Thermistor and inductance
CO3	To determine the series and parallel resonance
CO4	To construction and verification Logic gates
CO5	To construction and verification of OP-amp

Course Name: MAJOR PRACTICAL-IV	Course Code: 16SCDPR4P
Upon Completion of the Course Students would be able to	
CO1	To find the Wavelength,Dispersive power and Cauchy's constant
CO2	To determine the value of M and E,voltmeter calibration
CO3	To construction and characteristics amplifier,oscillator
CO4	To write ALP of arithmatic of intel 8085
CO5	To write ALP of Conversion of intel 8085

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THANJAVUR-5
PG DEPARTMENT OF COMPUTER SCIENCE
B.Sc COMPUTER SCIENCE - PROGRAM OUTCOME

PO1	An ability to comprehend the basic concepts learnt and apply in real life situations with analytical skills.
PO2	An ability to apply mathematical foundation, algorithmic principles, and computer science theory in the modeling and design of computational systems in a way that demonstrates comprehension of the tradeoff involved in the design choices.
PO3	An ability to apply design and development principles in the construction of software systems of varying complexity.
PO4	An ability to acquire knowledge of modern software tools will be able to contribute effectively as a software engineers.
PO5	An ability to comprehend the related concepts to Computer Science with Allied papers.

B.Sc COMPUTER SCIENCE - COURSE OUTCOME

COURSE NAME : PROGRAMMING IN C		COURSE CODE: 16SCCCS1
Upon Completion of the course students will able to		
CO1	Understanding the basic concepts of C like constants, variables, data types operators and expressions.	
CO2	Understanding the concepts of managing input output operations, decision making, branching and looping.	
CO3	Understanding the concepts of character Arrays and Strings, User defined Functions.	
CO4	Describes the concepts of Structures and Unions and Pointers.	
CO5	Understanding about Dynamic memory allocation, Linked lists and Preprocessors.	

COURSE NAME : PROGRAMMING IN C LAB		COURSE CODE: 16SCCCS1P
Upon Completion of the course students will able to		
CO1	Develop C program using basic concepts.	
CO2	Implement Conditional control statements, Switch statements and Loop structures.	
CO3	Develop C program using the concepts of Arrays, Pointers.	
CO4	Solve the problem using concepts of Function, Recursion, Call by value & Call by Reference.	
CO5	Update the details of information using various file modes.	

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COURSE NAME : PROGRAMMING IN C++	COURSE CODE: 16SCCCS2
Upon Completion of the course students will able to	
CO1	Describes the procedural and object oriented paradigm with the concepts, benefits, applications functions.
CO2	Understanding the classes and objects, constructors & destructors, operator overloading.
CO3	Understanding the concepts of Inheritance, pointers, and polymorphism.
CO4	Describes the concepts of managing console I/O operations, files and exception handling.
CO5	Understanding about manipulating strings and Object oriented systems development.

COURSE NAME : PROGRAMMING IN C++ LAB	COURSE CODE: 16SCCCS2P
Upon Completion of the course student will able to	
CO1	Perform concepts of Classes using C++ programming language.
CO2	Implement Constructor and Destructor.
CO3	Implement Operator Overloading.
CO4	Solve the problem using Inheritance.
CO5	Implement Files and Exception Handling in C++.

COURSE NAME : PROGRAMMING IN JAVA	COURSE CODE : 16SCCCS3
Upon Completion of the course student will able to	
CO1	Describes the Introduction to OOPS and Introduction to Java Programming.
CO2	Understanding Java Data Types, Variable, Operations and Assignment, Control Structures, Arrays, Strings.
CO3	Describes Classes, Modifiers, Packages, Interfaces.
CO4	Describes Exception Handling and Multi Threading in Java.
CO5	Understanding Files and I/O Streams and Java Applets.

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COURSE NAME : PROGRAMMING IN JAVA LAB	COURSE CODE: 16SCCCS3P
Upon Completion of the course student will able to	
CO1	Implement the Java program using arrays.
CO2	Implement a Calculator to perform basic arithmetic operations.
CO3	Solve the problem using the concepts of constructors, polymorphism and inheritance.
CO4	Implement the java program using interface, multi threads, applets.
CO5	Create a window using applets.

COURSE NAME : DATABASE SYSTEMS	COURSE CODE : 16SCCCS4
Upon Completion of the course student will able to	
CO1	It provides the basic concepts of the database systems including Data Models, Storage Structure.
CO2	Describes the Structure of relational databases, Database schema, Relational operations , Relational algebra operations.
CO3	Understanding the concepts of Basic structure of SQL queries, Set operations, Transactions, Authorization.
CO4	Provides the concepts of Relational languages, Entity-relationship design issues, aspects of Database design.
CO5	Understanding about Features of good relational designs, normalization and more normal for

COURSE NAME : DATABASE SYSTEMS LAB	COURSE CODE: 16SCCCS4P
Upon Completion of the course student will able to	
CO1	Provide the knowledge in developing DDL and DML commands.
CO2	Develop MySQL queries to implement the set operatioins.
CO3	Implement aggregate functions.
CO4	Develop and implement Join operations.
CO5	Implement nested queries and to create a views and expand it.

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COURSE NAME : DATA STRUCTURES AND ALGORITHMS	COURSE CODE : RCCS10CS5
Upon Completion of the course student will able to	
CO1	Understanding Arrays, ordered list, Stacks and Queues, Multiple Stacks and Queues, Singly Linked List.
CO2	Understanding Trees, Graphs, Activity Networks, Paths.
CO3	Understanding the concepts of Algorithms, Priority Queues, Binary Search.
CO4	Describes the concepts of Greedy Method, Optimal Storage on Tapes, Optimal Merge Patterns.
CO5	Understanding about the General Method, The 8-Queens Problem, Graph Coloring.

COURSE : DATABASE SYSTEMS	COURSE CODE : RCCS10CS6
Upon Completion of the course student will able to	
CO1	It provides the basic concepts of the database systems including Data Models, Storage Structure.
CO2	Describes the Structure of relational databases, Database schema, Relational operations , Relational algebra operations.
CO3	Understanding the concepts of Basic structure of SQL queries, Set operations, Transactions, Authorization.
CO4	Provides the concepts of Relational languages, Entity-relationship design issues, aspects of Database design.
CO5	Understanding about Features of good relational designs, normalization and more normal forms.

COURSE NAME: OPERATING SYSTEM	COURSE CODE : RCCS10CS7
Upon Completion of the course student will able to	
CO1	Understanding about evolution of operating systems, functions, different views of OS, Interruptstructure and processing.
CO2	Understanding the concepts of memory management.
CO3	Understanding the concepts of Processor management.
CO4	To gain knowledge on Device management.
CO5	Understanding the concepts of File management with case studies.

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COURSE NAME : MYSQL LAB	COURSE CODE: RCCS10CS5P
Upon Completion of the course student will able to	
CO1	Find the results using the relations with suitable queries with no duplicate values.
CO2	Impement to keep track of airline flight information using given relations.
CO3	Solve the relations using key constraints.
CO4	Implement the queries using relational algebra.
CO5	Create a table, to find the specific values and to demonstrate the MySql operations.

COURSE NAME : OPERATING SYSTEMS LAB	COURSE CODE: RCCS10CS6P
Upon Completion of the course student will able to	
CO1	Implement the menu driven shell program.
CO2	Perform the Testing of the File Existence, File readable, File Writable, Both Readable by accepting the specific file.
CO3	Understand the shell program using three arguments to take the pattern as well as input and output files.
CO4	Understand the concepts of menu driven shell program for editing, Pass word, ipconfig and ping.
CO5	Implement the shell program to find, accepts the files and directories.

COURSE NAME: MICROPROCESSOR AND ITS APPLICATION	COURSE CODE : RCCS10CS8
Upon Completion of the course student will able to	
CO1	To know about the evaluation of microrpocessors, Programming digital computers, Processor architecture - Intel 8085.
CO2	To impart knowledge on instruction sets of Intel 8085, addressing modes, programming of microprocessors, macro, microprogramming.
CO3	Understanding the concepts of assembly language programming
CO4	To know about the pheripheral devicea and interfacing, Interrupts, A/D, D/A converter.
CO5	Understand the microprocessor applications like delay subroutines, Interfacing seven segment display, Temperature measurement and control, water level indicator, traffic control.

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COURSE NAME : COMPUTER NETWORKS		COURSE CODE : RCCS10CS9
Upon Completion of the course student will able to		
CO1	Describes the Data Communications Networks, Network Models, The OSI Model, Multiplexing, Transmission Media, SwitchingPacket.	
CO2	Understanding the concepts of Data Link Layer, Wireless Networks, Bluetooth, Cellular Telephone, Satellite network, Connection devices.	
CO3	Understanding the concepts of Network Layer Services, performance,Routing Algorithms, IPV6 Addressing.	
CO4	Describes the concepts of Transport Layer, User Datagram Protocol, TCP, Flow Control, Error Control, TCP Congestion Control, TCP timers.	
CO5	Understanding about Application Layers , Word Wide Web & HTTP , FTP Email , DNS	

COURSE NAME : COMPUTER GRAPHICS AND MULTIMEDIA		COURSE CODE : MBECS2:1/10
Upon Completion of the course student will able to		
CO1	Describes Overview of graphics systems,Video display devices, Graphics monitors and workstation, Input devices, Hard-copy devices, Graphics software.	
CO2	Understanding Output primitives: Points and lines, Attributes of output primitiveS, Line, Area-fill, Character, Bundled attributes.	
CO3	Understanding the concepts of Two-dimensional Geometric transformations, Matrix representations, Composite transformations, Other transformations.	
CO4	Describes the concepts of Multimedia in Use, Multimedia Applications, Benefits and Problems, Technology : System Components, Multimedia Platforms.	
CO5	Understanding about Technology: Development Tools – Image – Audio – Video.	

COURSE NAME : MICROPROCESSOR LAB		COURSE CODE: RCCS10CS7P
Upon Completion of the course student will able to		
CO1	Implement 8 - bit addition, Seperating out a hexa decimal digit, sum of series, data transfer using Intel 8085.	
CO2	Develop and execute programs fo display and for solving problems using subroutines on Intel 8085 Microprocessor.	
CO3	Implement the Matrix Display using 8255.	
CO4	Perform D/A & A/D converters using discrete component modules.	
CO5	Implement Traffic Signal.	

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COURSE NAME : HTML LAB		COURSE CODE: RCCS10CS8P
Upon Completion of the course student will able to		
CO1	Develop web pages using HTML documents.	
CO2	Understanding to create a web document using paragraph, back ground design, colour and text color.	
CO3	Develop complete web pages using Frames and Framesets.	
CO4	Develop complete set of web pages to describe the skills in variuous areas using HTML.	
CO5	Develop amd Design the various registration form and to create tables using HTML.	

COURSE NAME : MINI PROJECT		COURSE CODE: MBE10CSPW
Upon Completion of the course student will able to		
CO1	Enable the students to develop a project with a latest technologies.	
CO2	Plan, Analyse, design, implement and apply various types of testing.	
CO3	Communicate effectively in both oral and writing.	
CO4	Learn about different software development process models and the different features of software for their selected problem.	
CO5	Know about recent tools and technologies in software industry and also the scope their specialized areas in different fields in the industry.	

COURSE NAME : DATA STRUCTURES AND ALGORITHMS		COURSE CODE : 16SCCCS5
Upon Completion of the course student will able to		
CO1	Understanding Arrays, ordered lists, Stacks and Queues, Multiple Stacks and Queues, Singly Linked List	
CO2	Understanding Trees, Graphs, Activity Networks, Paths..	
CO3	Understanding the concepts of Algorithms, Priority Queues, Binary Search.	
CO4	Describes the concepts of Greedy Method, Optimal Storage on Tapes, Optimal Merge Patterns.	
CO5	Understanding about the General Method, The 8-Queens Problem, Graph Coloring.	

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COURSE NAME : COMPUTER NETWORKS		COURSE CODE : 16SCCCS6
Upon Completion of the course student will able to		
CO1	Describes the Data Communications Networks, Network Models, The OSI Model, Multiplexing, Transmission Media, SwitchingPacket.	
CO2	Understanding the concepts of Data Link Layer, Wireless Networks, Bluetooth, Cellular Telephone, Satellite network, Connection devices.	
CO3	Understanding the concepts of Network Layer Services, performance,Routing Algorithms, IPV6 Addressing.	
CO4	Describes the concepts of Transport Layer, User Datagram Protocol, TCP, Flow Control, Error Control, TCP Congestion Control, TCP timers.	
CO5	Understanding about Application Layers , Word Wide Web & HTTP , FTP Email , DNS	

COURSE NAME : DIGITAL ELECTRONICS AND MICROPROCESSOR		COURSE CODE : 16SCCCS7
Upon Completion of the course student will able to		
CO1	Describes the various Number System, Number System conversion, Logic Gates and circuits	
CO2	Understanding the concepts of Fundamentals of Boolean Algebra, Laws and Theorems, Simplifying Logic Circuits, NAND and NOR Implementation.	
CO3	Understanding the concepts of Combinational Logic Circuits, Adders & its types, Multiplexers, Demultiplexers , Decoders, Encoders, Registers.	
CO4	Describes the concepts of Microprocessor, Microcomputer, Buses.	
CO5	Understanding about Instruction and Data Format, Address Modes, Status Flags, Assembler.	

COURSE NAME : DIGITAL ELECTRONICS AND MICROPROCESSOR LAB		COURSE CODE: 16SCCCS5P
Upon Completion of the course student will able to		
CO1	Implement the practical related to Digital Electronics and Intel 8085 Microprocessors.	
CO2	Verify the logic gates, constructing the half and full adder.	
CO3	Implement K-Map to reduce the digital circuit, Shigt Registers, Up Down Counters.	
CO4	Implement assembly language program for addition, subtraction, sum of series, data transfer.	
CO5	Implement assembly language program for finding maximum of N numbers and conversion of decimal to hexa decimal number.	

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COURSE NAME : MANAGEMENT INFORMATION SYSTEM		COURSE CODE : 16SMBECS1:3
Upon Completion of the course student will able to		
CO1	Describes the Definition , Objectives , Uses and Limitations of MIS	
CO2	Understanding Computer Softwares , Types and Trends.	
CO3	Describes Management System in Business, Marketing , Human Resource.	
CO4	Describes the Application of IT in Business , E-Commerce, Mobile Commerce, E-Governance, E-enterprises, etc.	
CO5	Understanding Information security, Types of Breaches, Challenges , Cyper Laws and IT Act 2000 etc.	

COURSE NAME: PROGRAMMING IN PHP LAB		COURSE CODE : 16SCCCS6P
Upon Completion of the course student will able to		
CO1	To impart the practical knowledge in PHP Programming Language.	
CO2	Practically understanding the concepts of conditional statements.	
CO3	Understanding the concept of multidimensional array.	
CO4	Construct PHP scripts to create dynamic web content.	
CO5	Understanding the concept of cookies, session, design an authentication web page in PHP with MySQL.	

COURSE NAME : OPERATING SYSTEMS		COURSE CODE : 16SCCCS8
Upon Completion of the course student will able to		
CO1	Describes Introduction to Operating System, History, Types, Development, Object-Oriented Design.	
CO2	Understanding Memory Management - Early Memory, Partitions, Virtual memory.	
CO3	Describes Processor Management , Multi-Core Technologies, Dead Locks, Concurrent Processes.	
CO4	Describes Device Management, Types of Devices, Storage, Components of IO and management of IO.	
CO5	Understanding File Management, Physical Storage Allocation, Access Methods, Access Control.	

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COURSE NAME : PROGRAMMING IN PHP		COURSE CODE : 16SCCCS9
Upon Completion of the course student will able to		
CO1	Understanding the concepts and essentials of PHP.	
CO2	Understanding the concepts of creating functions, reading data in webpages, handling power.	
CO3	Understanding about advanced object oriented programming.	
CO4	Describes about the file handling, working with databases, sessions, cookies and FTP.	
CO5	Understanding Advanced Ajax, Drawing images on the server.	

COURSE NAME : CLOUD COMPUTING		COURSE CODE : 16SMBECS2:2
Upon Completion of the course student will able to		
CO1	Introduction to Cloud Computing, Move to Cloud Computing, Types, Working of Cloud Computing.	
CO2	Understanding Cloud Computing Architecture,Cloud Modeling and Design, Virtualization.	
CO3	Describes Data Storage , Cloud Storage from LANs to WANs, Cloud Computing Services,Cloud Computing at Work.	
CO4	Describes the Risks in Cloud Computing, Data Security, Security Services, Tools : Tools and Technologies for Cloud, Cloud Mashaps, Apache Hadoop.	
CO5	Understanding Cloud Applications, Microsoft, Google, Amazon cloud, Cloud Applications	

COURSE NAME : MINI PROJECT		COURSE CODE: 16SMBECSPW
Upon Completion of the course student will able to		
CO1	Enable the students to develop a project with a latest technologies.	
CO2	Plan, Analyse, design, implement and apply various types of testing.	
CO3	Communicate effectively in both oral and writing.	
CO4	Learn about different software development process models and the different features of software for their selected problem.	
CO5	Know about recent tools and technologies in software industry and also the scope their specialized areas in different fields in the industry.	

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(UGC Recognized 2(f) and 12(B) Institution)

(Affiliated to Bharathidasan University, Trichy - 24)

Attainment of program outcomes and course outcomes

Course Outcome-Programme Outcome Mapping

ACADEMIC YEAR : 2017 - 2018
Department of TAMIL

PROGRAM OUTCOME

PO1	தமிழ் இலக்கியங்களின் இலக்கணை பல்வேறு படைப்புகளின் வாயிலாக வெளிப்படுத்தி மாணவர்கள் மனதில் படியும் விதமாக வடிவங்களை (மரபுக் கவிதை, புதுக்கவிதை, சிறுகதை, கட்டுரை) போன்றவற்றை அறிமுகம் செய்து வாசிக்க வைக்க முயற்சித்து மாணவர்கள் சமூக தனிமனித ஒழுக்கங்களை மேம்படுத்த இலக்கியங்கள் பயன்படுவதை காணமுயற்சித்து இலக்கியங்கள் எளிமை, சுருக்கம், உற்றி போன்றவை முலமாக அறியும் ஆவலை மேம்படுத்துதல், நாட்டுப்புற பண்பாட்டினை மாணவர்களுக்கு தெரியப்படுத்துதல், தமிழ் இலக்கியத்தின் மீதான ஆர்வத்தைத் தூண்டுதல், சுயசிந்தனையுள்ள மாணவர்களை உருவாக்குதல்
PO2	இடைக்காலத்து இலக்கிய வகைமை முலம் வரலாறு பண்பாட்டு மாற்றங்கள் பக்தி நிலை, மொழி நிலை, மாற்றத்தை வை, வைணவ இலக்கியங்கள் தோன்றி சமூகத்தில் சமயம் சார்ந்த கோட்பாடுகள், வரலாறுகள், வரையறைகள், குறித்து சமூகதோடு அணைந்து சமங்களும் அன்பையே வலியுறுத்துகின்றன என்பதை மாணவர்களிடையே புரியவைத்தல் சிற்றிலக்கியத்தின் தோற்றம் வரையறை -
PO3	புராண இதிகாசங்களை எளிய முறையில் தொடர்நிலை செய்யுள் வடிவத்தில் பாடப்பட்டதால் காப்பிய இலக்கியம் சிறப்படைத்ததாகிறது அறம், பொருள், இன்பம், வீடு ஆகிய உறுதிப் பொருட்கள் மட்டுமே வாழ்வின் முழுமைக்கு முதன்மையானதாக உள்ளதையும் அதனை பின்பற்ற காப்பிய மாந்தர்களின் வாழ்வியலை மாணவர்கள் அறியும் நோக்கோடு காப்பியம் இலக்கியம் கற்கப்படுகிறது
PO4	சங்க கால இலக்கியங்களை பொற்கால இலக்கியங்கள் என்று போற்றுவதன் காரணம் அறியப்படுகிறது ஒருவனுக்கு ஒருத்தி என்னும் பண்பாட்டைக் கொண்ட தமிழ் சமூகம் அகம் புறம் என வாழ்வியலை கொண்டுள்ளது ஒழுக்கத்தை ஒன்றாகவும், வாழ்வியலை இரண்டாகவும், காலத்தை மூன்றாகவும், நிலத்தை நான்காகவும், திணையை ஐந்தாகவும் பொழுதை ஆறாகவும் கொண்டு வாழ்வியலை அமைத்த சங்க புலவரின் நிலைபாடு இக்காலத்தின் சூழலோடு இயைந்து வருவதை அகப்புற இலக்கியத்தின் வாயிலாக அறிதல்
PO5	சங்க கால இலக்கியத்திற்கு பின் தோன்றி அற இலக்கியங்களான பதினென் கீழ்கணக்கு நூல்கள் மனித வாழ்விற்கு தேவையான அறங்களை கூறி அதன் பயனையும் சுருங்கைத்து செம்மொழி வரையறை புதுக்கவிதை காலம் காட்டும் கண்ணாடி, சிறுகதை கதை சொல்லி விளங்க வைத்தல், உரைநடை எழுத்தாற்றலை அதிகப்படுத்துதல், புதினம் காலம் தோறும் ஏற்படும் மாற்றத்தை உணர்ச் செய்தல், நாடகம் முத்தமிழின் வடிவமாக திகழ்தல் உள்ளிட்ட அனைத்தின் தோற்றம் வளர்ச்சி பற்றி கூறுதல்

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COURSE OUTCOME

Course Name: இக்கால இலக்கியம் **Course Code: 16LCT1**

CO1	பாரதியார் பாடல்களில் செந்தமிழ் நாடு, புதுமைப்பெண் பாடல்கள் - பாரதிதாசன் பாடல்களில் அழகு, தமிழுக்கு வீழ்ச்சியில்லை பாடல்கள் - கவிமணியின் பாடல்களில் சுகாதரக்கும்மி, தொழிலாளியின் முறையீடு பாடல்கள் - சுரதாவின் பாடல்களில் கல்பனை, போலி உடுப்பு பாடல்கள்
CO2	நாமக்கல் கவிஞரின் தமிழ் வாழ்க, தருணம் இதுவே பாடல்கள் - கவி காமு ஷெரிபின் தமிழே நிலவே சொல், அரிய முயல் பாடல்கள் - கண்ணதாசனின் அனுபவம், நட்பு பாடல்கள் - வாணிதாசனின் வாழ்க இளம்பரிதி, உயிர் வாட்டும் காலம் பாடல்கள்
CO3	நாட்டுப்புறப் பாடல்களில் தாலாட்டு, ஒப்பாரிப் பாடல்கள் - புதுக்கவிதையில் கவிஞர் அப்துல் ரகுமான் முதல் வைரமுத்து வரையிலான பத்து கவிஞர்களின் கவிதைகள் - ஹைக்கூ கவிதைகளில் கவிஞர் அமுதபாரதி முதல் தமிழ் நெஞ்சன் வரையிலான பத்து கவிஞர்களின் கவிதைகள்
CO4	சிறுகதை - வைவண்ணம் (தேர்ந்தெடுக்கப்பட்ட சிறுகதைகள்) உரைநடை - சிந்தனைச் சுடர் (பேரா. பி. விருத்தாசலம்)
CO5	இலக்கிய வரலாறு 1. மரபுக்கவிதை, 2. புதுக்கவிதை, 3. உரைநடை, 4. சிறுகதை மனப்பாடப்பகுதி 1. பாரதியார் கவிதைகள், 2. பாரதிதாசன் கவிதைகள்

COURSE OUTCOME

Course Name: இடைக்கால இலக்கியமும் புதினமும் **Course Code: 16LCT2**

CO1	பன்னிரு திருமுறைகள் 1. திருநாவுக்கரசர் தேவாரம், 2. சுந்தரர் தேவாரம், 3. மாணிக்கவாசகர் திருவாசகம், 4. திருமூலர் திருமந்திரம்
CO2	நாலாயிர திவ்யப் பிரபந்தம் - 1. பெரியாழ்வார் திருமொழி, 2 தொண்டரடிப்பொடியாழ்வார் திருமாலை, 3. திருப்பாணாழ்வார் அமலன் ஆதிபிரான், 4. மதுரகவியாழ்வார் கண்ணிநுண் சிறுத்தாம்பு
CO3	சிற்றிலக்கியங்கள் - 1. முத்துக்குமார சுவாமி பிள்ளைத்தமிழ், 2. நந்திக்கலம்பகம், 3. தமிழ்விடுதூது, 4. குற்றாலக் குறவஞ்சி, 5. கலிங்கத்துப் பரணி, 6. தனிப்பாடல்கள்
CO4	புதினம் - ஆற்றங்கரை ஓரம் ஆசிரியர் வெ.இறையன்பு, இ.ஆ.ப
CO5	தமிழ் இலக்கிய வரலாறு மொழி விளக்கம் - மொழிக் குடும்பங்கள் - உலக செம்மொழிகள் - இந்திய செம்மொழிகள் - செம்மொழித் தகுதிகள் - வரையறைகள் - தமிழின் தொன்மை - அறப்போராட்டங்கள் - தமிழ் அமைப்புகள் - நிறுவனங்கள்

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COURSE OUTCOME

Course Name: காப்பியமும் நாடகமும் Course Code: 16LCT3

CO1	தமிழில் தோன்றிய முதல் காப்பியம் சிலப்பதிகாரம் - 30 காதைகளைக் கொண்டது பாடத்திட்டத்தில் அடைக்கலக் காதையில் அடைக்கலப் பொருளின் சிறப்பு, கௌந்தியடிகள் கண்ணகியை அடைக்கலமாக மாதரியிடம் கொடுத்தல் - மணிமேகலை இரட்டைக்காப்பியத்தில் ஒன்று, அட்சயப் பாத்திரம் பெற்ற மணிமேகலை சிறைக் கோட்டத்தை அறக்கோட்டமாக மாற்றுதல் - சீவகசிந்தாமணி ஐம்பெரும் காப்பியங்களுள் மணநூல், சீவகன் எட்டு பெண்களை மணம் புரிதல், விமலையார் இலம்பகம் தாய் விசையையும் சீவகனும் சந்தித்தல்
CO2	தமிழில் அமைந்த இருபெரும் இதிகாசத்தில் ஒன்று கம்பராமாயணம், இராமனின் பிறப்பு முதல் கூறும் இந்நூலில் குகப்படலம் குகனின் தோற்றம், பரதனின் சிறப்பு பற்றி அறிதல் - வில்லி புத்தூராழ்வார் இயற்றிய வில்லி பாரதத்தில் அமைந்த உலூகன் தூது சருக்கத்தில் உலூக முனிவன் துரியோதனனிடம் பாண்டவர்களுக்காக தூது செல்லுதல்
CO3	சேக்கிழார் பெருமான் இயற்றிய பெரிய புராணம் அறுபத்து மூன்று நாயன்மார்கள் ஒன்பது தொகை அடியார்கள் வாழ்க்கை வரலாறைக் கூறுகின்றது இதில் திருநாளைப்போவார் நாயனார் புராணத்தில் நந்தனார் இறைவனோடு கலந்த நிகழ்வு கூறப்படுகின்றது, முகமதியர்களின் காவியமான சீறாப்புராணம் நபிகள் நாயகத்தின் வாழ்க்கை வரலாறைக் கூறுகின்றது, இதில் ஈத்தங்குலை வரவழைத்த படலத்தில் அரபிக்காக நபிகள் ஈத்தங்குலை வரவழைத்தல் கூறப்படுகிறது - கிருத்துவ இலக்கியமான தேம்பாவணி சூசையப்பரின் வாழ்க்கையை கூறுகிறது, நீர் வரம் அடைந்த படலத்தில் குழந்தை இயேசுவின் ஆடை நீர் நிலையில் அலசியதால் நீர் புனிதம் அடைந்த தன்மை கூறப்படுதல்
CO4	சாம்?... விமோசம் நாடகத்தில் சாம் பெரும் முனிவர் தன் சீடர்களின் வேண்டலை ஏற்காமல் சாப நிலையிலேயே வாழ நினைக்கின்றார் அவரின் சாபமே விமோச்சம் ஆகிறது - புரட்சிக்கவியில் சாமானியன் புரட்சியாளனாக மாறுதல் கூறப்படுகிறது - ஆத்திரன் நாடகத்தில் ஆவின் மகனாக பிறந்தவன் உயர்நிலை அடையும் முன் படும்பாடு கூறப்படுகிறது
CO5	தமிழ் இலக்கிய வெளியில் காப்பிய இலக்கிய அமைப்பையும் அதன் அடிப்படையில் காப்பியங்கள், புராண இதிகாசங்கள், நாடக இலக்கிய அமைப்பு, சிற்றிலக்கியங்களின் வகைகள் அதன் தோற்றம், வளர்ச்சியைப் பற்றி எடுத்துரைத்தல்

& CO

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COURSE OUTCOME

Course Name: பண்டைய இலக்கியம் **Course Code: 16LCT4**

CO1	எட்டுத்தொகை நூல்களுள் ஒன்று குறுந்தொகை, 401 பாடல்களைக் கொண்டது, அகம் சார்ந்த பாடல்களில் பா.எ.07, 23, 38, 222, 396 உள்ளிட்ட பாடல்களின் பொருள் சிறப்பு துறை பற்றிய செய்திகள் அறியப்பட்டது - நல் திணை எனப்படும் நற்றிணையின் பாடல் அடிகள் திணைபற்றிய செய்திகளோடு பாடல் எண் 01, 120 ஆகிய பாடல்களின் செய்திகள் கூறுதல் சங்க
CO2	கற்றறிந்தார் ஏத்தும் கலியில் (கலித்தொகை) குறிஞ்சிக் கலி (சுடர்தொடீ இ பாடல்) நெய்தற் கலி (மாமலர் பாடல்) உள்ளிட்டப் பாடல்களில் திணை சார்ந்த செய்திகள் அறிதல் - பத்துப்பாட்டில் நல்லூர் நத்தத்தனார், ஓய்மா நாட்டு நல்லியக்கோடன் மீது இயற்றிய சிறுபாணாற்றுப்படையில் ஐந்து நில வர்ணனை, கடையெழு வள்ளல்கள், பாணன் விறலியின் நிலை கூறி ஆற்றுப்படுத்துதல்
CO3	அகம் எனும் பெயர் கொண்ட அகநானூற்றில் அகல்அறை பாடல், நோகோ எனத்தொடங்கும் பாடலும் முப்பொருள் விளக்குவதாக அமைந்திருப்பதைக் காணுதல் - புறம் எனும் புறநானூற்றில் பாடல்எண் 47, 163, 182, 204, 217 உள்ளிட்டவைகளில் அமைந்த புறம் சார்ந்த செய்திகளைக் காணுதல்
CO4	பதினெண் கீழ்க்கணக்கு நூல்களில் ஒன்றான திருக்குறளில் புறங்கூறாமை, மானம், நெஞ்சொடு கிளத்தல் உள்ளிட்ட திகாரங்களை கற்றல் - நாலடியாரில் அரும்பெறல், கல்லாதபோகிய, கோட்டுப்பூப் போல, நன்னிலைக்கண், ஒருநன்றி எனத்தொடங்கும் பாடல்களின் கருத்துக்களை அறிதல் - பழமொழி நானூறில் புலமிக்கவரை, முல்லைக்கு, பூத்தாலும், செயல்வேண்டா, நாடிநமரென்று எனத் தொடங்கும் பழமொழிகள் அமைந்தப் பாடல்களை கூறுதல்
CO5	சங்க இலக்கியம் - பத்துப்பாட்டு - எட்டுத்தொகை - பதினெண் கீழ்க்கணக்கு நூல்கள் - மனிதநேயம், வாழ்வியல் அறங்கள், மொழி உணர்ச்சி, அறிவியல் வளர்ச்சி உள்ளிட்ட தலைப்புகளில் அமைந்த பொதுக்கட்டுரைகள்

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(Affiliated to Bharathidasan University, Trichy - 24)

Attainment of program outcomes and course outcomes

Course Outcome-Programme Outcome Mapping

ACADEMIC YEAR : 2018 - 2019
Department of TAMIL

PROGRAM OUTCOME

PO1	தமிழ் இலக்கியங்களின் இடம்புகளை பல்வேறு படைப்புகளின் வாயிலாக வெளிப்படுத்தி மாணவர்கள் மனதில் படியும் விதமாக வடிவங்களை (மரபுக் கவிதை, புதுக்கவிதை, சிறுகதை, கட்டுரை) போன்றவற்றை அறிமுகம் செய்து வாசிக்க வைக்க முடிகிறது. மாணவர்கள் சமூக தனிமனித ஒழுக்கங்களை மேம்படுத்த இவ்விலக்கியங்கள் பயன்படுவதை காணமுடிகிறது. இவ்விலக்கியங்கள் எளிமை, சுருக்கம், உத்தி போன்றவை மூலமாக அரியும் ஆவலை மேம்படுத்துதல், நாட்டுப்புறப் பண்பாட்டினை மாணவர்களுக்கு தெரியப்படுத்துதல், தமிழ் இலக்கியத்தின் மீதான ஆர்வத்தைத் தூண்டுதல், சுயவாசிப்புக்கு மாணவர்களைப் பழக்குதல்
PO2	இடைக்காலத்து இலக்கிய வகையின் மூலம் வரலாறு பண்பாட்டு மாற்றங்கள் பக்தி நிலை, மொழி நிலை, மாற்றத்தை சைவ, வைணவ இலக்கியங்கள் தோன்றி சமூகத்தில் சமயம் சார்ந்த கோட்பாடுகள், வரலாறுகள், வரையறைகள், குறித்து கூறுவதோடு அனைத்து சமங்களும் அடையே வலியுறுத்துகின்றன என்பதை மாணவர்களிடையே புரியவைத்தல். சிற்றிலக்கியத்தின் தோற்றம் வரையறை -
PO3	புராண இதிகாசங்களை எளிய முறையில் தொடர்நிலைச் செய்யுள் வடிவத்தில் பாடப்பட்டதால் காப்பிய இலக்கியம் சிறப்படைத்ததாயிற்று. அறம், பொருள், இன்பம், வீடு ஆகிய உறுதிப் பொருட்கள் மட்டுமே வாழ்வின் முழுமைக்கு முதன்மையானதாக உள்ளதையும் அதனை பின்பற்ற காப்பிய மாந்தர்களின் வாழ்வியலை மாணவர்கள் அரியும் நோக்கோடு காப்பியம் இலக்கியம் கற்கப்படுகிறது
PO4	சங்க கால இலக்கியங்களை பொற்கால இலக்கியங்கள் என்று போற்றுவதன் காரணம் அரியப்படுகிறது. ஒருவனுக்கு ஒருத்தி என்னும் பண்பாட்டைக் கொண்ட தமிழ் சமூகம் அகம் புறம் என வாழ்வியலை கொண்டுள்ளது. ஒழுக்கத்தை ஒன்றாகவும், வாழ்வியலை இரண்டாகவும், காலத்தை மூன்றாகவும், நிலத்தை நான்காகவும், திணையை ஐந்தாகவும், பொழுதை ஆறாகவும் கொண்டு வாழ்வியலை அமைத்த சங்க புலவரின் நிலைபாடு இக்காலத்தின் சூழலோடு இயைந்து வருவதை அகப்புற இலக்கியத்தின் வாயிலாக அறிதல்
PO5	சங்க கால இலக்கியதிற்கு பின் தோன்றி அற இலக்கியங்களான பதினென் கீழ்கணக்கு நூல்கள் மனித வாழ்விற்கு தேவையான அறங்களை கூறி அதன் பயனையும் கூறுகின்றது. செம்மொழி வரையறை புதுக்கவிதை காலம் காட்டும் கண்ணாடி, சிறுகதை கதை செல்லி விளங்க வைத்தல், உரைநடை எழுத்தாற்றலை அதிகப்படுத்துதல், பதினம் காலம் தோறும் ஏற்படும் மாற்றத்தை உணரச் செய்தல், நாடகம் முத்தமிழின் வடிவமாக திகழ்தல் உள்ளிட்ட அனைத்தின் தோற்றம் வளர்ச்சி பற்றி கூறுதல்

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COURSE OUTCOME

Course Name: இக்கால இலக்கியம் **Course Code:** 16LCT1

CO1	பாரதியார் பாடல்களில் செந்தமிழ் நாடு, புதுமைப்பெண் பாடல்கள் - பாரதிதாசன் பாடல்களில் அழகு, தமிழனுக்கு வீழ்ச்சியில்லை பாடல்கள் - கவிமணியின் பாடல்களில் சகோதரத்துவம், தொழிலாளியின் முறைமிடு பாடல்கள் - சுரதாவின் பாடல்களில் கவ்வை, போலி உடும்பு பாடல்கள்
CO2	நாமக்கல் கவிஞரின் தமிழ் வாழ்க, தருணம் இதுவே பாடல்கள் - கவி காமு வெரியின் தமிழே, நிலவே சொல், அறிய முடல் பாடல்கள் - கண்ணதாசனின் அனுபவம், நட்பு பாடல்கள் - வாணிதாசனின் வாழ்க இன்பரிதி, உயிர் வாட்டும் காலம் பாடல்கள்
CO3	நாட்டுப்புறப் பாடல்களில் தாலாட்டு, ஒப்பாரிப் பாடல்கள் - புதுக்கவிதையில் கவிஞர் அதன் ரகுமான், முதல் வைரமுத்து வரையிலான பத்து கவிஞர்களின் கவிதைகள் - ஹைக்கூ கவிதைகளில் கவிஞர் அமுதபாரதி முதல் தமிழ் நெஞ்சன் வரையிலான பத்து கவிஞர்களின் கவிதைகள்
CO4	சிறுகதை - கைவண்ணம் (தேர்ந்தெடுக்கப்பட்ட சிறுகதைகள்) உரைநடை - சிந்தனைச் சுடர் (டோ. பி. விருத்தாசலம்)
CO5	இலக்கிய வரலாறு 1. மரபுக்கவிதை, 2. புதுக்கவிதை, 3. உரைநடை, 4. சிறுகதை மனப்பாடப்பகுதி 1. பாரதியார் கவிதைகள், 2. பாரதிதாசன் கவிதைகள்

COURSE OUTCOME

Course Name: இடைக்கால இலக்கியமும் புதினமும் **Course Code:** 16LCT2

CO1	பன்னிரு திருமுறைகள் 1. திருநாவுக்கரசர் தேவாரம், 2. சுந்தரர் தேவாரம், 3. மாணிக்கவாசகர் திருவாசகம், 4. திருமூலர் திருமந்திரம்
CO2	நாலாயிர திவ்வியப் பிரபந்தம் - 1. பெரியாழ்வார் திருமொழி, 2 தொண்டரடிப்பொடியாழ்வார் திருமாலை, 3. திருப்பாணாழ்வார் அமலன் ஆதிபிரான், 4. மதுரகவியாழ்வார் கண்ணிநுண் சிறுத்தாம்பு
CO3	சிற்றிலக்கியங்கள் - 1. முத்துக்குமார சுவாமி பிள்ளைத்தமிழ், 2. நந்திக்கலம்பகம், 3. தமிழ்விடுதூது, 4. குற்றாலக் குறவஞ்சி, 5. கலிங்கத்துப் பரணி, 6. தனிப்பாடல்கள்
CO4	புதினம் - அத்தங்கரை ஓரம் ஆசிரியர் வெஇறையன்பு இ.ஆப
CO5	தமிழ் இலக்கிய வரலாறு மொழி விளக்கம் - மொழிக் குடும்பங்கள் - உலக செம்மொழிகள் - இந்திய செம்மொழிகள் - செம்மொழித் தகுதிகள் - வரையறைகள் - தமிழின் தொன்மை - அறப்போராட்டங்கள் - தமிழ் அமைப்புகள் - நிறுவனங்கள்

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COURSE OUTCOME

Course Name: காப்பியமும் நாடகமும் **Course Code: 16LCT3**

CO1	தமிழில் தோன்றிய முதல் காப்பியம் சிலப்பதிகாரம் - 30 காதைகளைக் கொண்டது பாடத்திட்டத்தில் அடைக்கலக் காதையில் அடைக்கலப் பொருளின் சிறப்பு, கௌந்தியடிகள் கண்ணகியை அடைக்கலமாக மாதரியிடம் கொடுத்தல் - மணிமேகலை இரட்டைக்காப்பியத்தில் ஒன்று, அட்சயப் பாத்திரம் பெற்ற மணிமேகலை சிறைக் கோட்டத்தை அறக்கோட்டமாக மாற்றுதல் - சீவகசிந்தாமணி ஐம்பெரும் காப்பியங்களுள் மணநூல், சீவகன் எட்டு பெண்களை மணம் புரிதல், விமலையார் இலம்பகம் தாய் விசையையும் சீவகனும் சந்தித்தல்
CO2	தமிழில் அமைந்த இருபெரும் இதிகாசத்தில் ஒன்று கம்பராமாயணம், இராமனின் பிறப்பு முதல் கூறும் இந்நூலில் குகப்படலம் குகனின் தோற்றம், பரதனின் சிறப்பு பற்றி அறிதல் - வில்லி புத்துராழ்வர் இயற்றிய வில்லி பாரதத்தில் அமைந்த உலூகன் தூது சருக்கத்தில் உலூக முனிவன் தருமோதனனிடம் பாண்டவர்களுக்காக தூது செல்லுதல்
CO3	சேக்கிழார் பெருமான் இயற்றிய பெரிய புராணம் அறுபத்து மூன்று நாயன்மார்கள் ஒன்பது தொகை அடியார்கள் வாழ்க்கை வரலாறைக் கூறுகின்றது இதில் திருநாளைப்போவார் நாயனார் புராணத்தில் நந்தனார் இறைவனோடு கலந்த நிகழ்வு கூறப்படுகின்றது முகமதியர்களின் காவியமான சீறாப்புராணம் நபிகள் நாயகத்தின் வாழ்க்கை வரலாறைக் கூறுகின்றது, இதில் ஈத்தங்குலை வரவழைத்த படலத்தில் அரபிக்காக நபிகள் ஈத்தங்குலை வரவழைத்தல் கூறப்படுகிறது - கிருத்துவ இலக்கியமான தேம்பாவணி சூசையப்பரின் வாழ்க்கையை கூறுகிறது, நீர் வரம் அடைந்த படலத்தில் குழந்தை இயேசுவின் ஆடை நீர் நிலையில் அலசியதால் நீர் புனிதம் அடைந்த தன்மை கூறப்படுதல்
CO4	சாபம்?... விமோசம் நாடகத்தில் சாபம் பெறும் முனிவர் தன் சீடர்களின் வேண்டலை ஏற்காமல் சாப நிலையிலேயே வாழ நினைக்கின்றார் அவரின் சாபமே விமோச்சம் ஆகிறது - புரட்சிக்கவியில் சாமானியன் புரட்சியாளனாக மாறுதல் கூறப்படுகிறது - ஆழ்த்திரன் நாடகத்தில் ஆவின் மகனாக பிறந்தவன் உயர்நிலை அடையும் முன் படும்பாடு கூறப்படுகிறது
CO5	தமிழ் இலக்கிய வெளியில் காப்பிய இலக்கிய அமைப்பையும் அதன் அடிப்படையில் காப்பியங்கள், புராண இதிகாசங்கள், நாடக இலக்கிய அமைப்பு, சிற்றிலக்கியங்களின் வகைகள் அதன் தோற்றம், வளர்ச்சியைப் பற்றி எடுத்துரைத்தல்

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COURSE OUTCOME

Course Name: பண்டைய இலக்கியம் **Course Code: 16LCT4**

CO1	எட்டுத்தொகை நூல்களுள் ஒன்று குறுந்தொகை, 401 பாடல்களைக் கொண்டது, அகம் சார்ந்த பாடல்களில் பா.எ.07, 23, 38, 222, 396 உள்ளிட்ட பாடல்களின் பொருள் சிறப்பு துறை பற்றிய செய்திகள் அறியப்பட்டது - நல் திணை எனப்படும் நற்றிணையின் பாடல் அடிகள் திணைப்பற்றிய செய்திகளோடு பாடல் எண் 01, 120 ஆகிய பாடல்களின் செய்திகள் கூறுதல் சங்க இலக்கியங்களில் பிரகம் குறிய வகளை உடைய ஐங்குறுநூற்றில் கலைவி இருந்த
CO2	கற்றறிந்தார் ஏத்தும் கலியில் (கலித்தொகை) குறிஞ்சிக் கலி (சுடர்தொடீ இ பாடல்) நெய்தற் கலி (மாமலர் பாடல்) உள்ளிட்டப் பாடல்களில் திணை சார்ந்த செய்திகள் அறிதல் - பத்துப்பாட்டில் நல்லூர் நத்தத்தனார், ஓய்மா நாட்டு நல்லியக்கோடன் மீது இயற்றிய சிறுபாணாற்றுப்படையில் ஐந்து நில வர்ணனை, கடையெழு வள்ளல்கள், பாண் விறலியின் நிலை கூறி ஆற்றுப்படுத்துதல்
CO3	அகம் எனும் பெயர் கொண்ட அகநானூற்றில் அகல்அறை பாடல், நோகோ எனத்தொடங்கும் பாடலும் முப்பொருள் விளக்குவதாக அமைந்திருப்பதைக் காணுதல் - புறம் எனும் புறநானூற்றில் பாடல்எண் 47, 163, 182, 204, 217 உள்ளிட்டவைகளில் அமைந்த புறம் சார்ந்த செய்திகளைக் காணுதல்
CO4	பதினெண் கீழ்க்கணக்கு நூல்களில் ஒன்றான திருக்குறளில் புறங்கூறாமை, மானம், நெஞ்சொடு கிளத்தல் உள்ளிட்ட திகாரங்களை கற்றல் - நாலடியாரில் அரும்பெறல், கல்லாதுபோகியு, கோட்டுப்பூப் போலு, நன்னிலைக்கண், ஒருநன்றி எனத்தொடங்கும் பாடல்களின் கருத்துக்களை அறிதல் - பழமொழி நானூறில் புலமிக்கவரை, முல்லைக்கு, பூத்தாலும், செல்வேண்டா, நாடிநமரென்று எனத் தொடங்கும் பழமொழிகள் அமைந்தப் பாடல்களை கூறுதல்
CO5	சங்க இலக்கியம் - பத்துப்பாட்டு - எட்டுத்தொகை - பதினெண் கீழ்க்கணக்கு நூல்கள் - மனிதநேயம், வாழ்வியல் அறங்கள், மொழி உணர்ச்சி, அறிவியல் வளர்ச்சி உள்ளிட்ட தலைப்புகளில் அமைந்த பொதுக்கட்டுரைகள்

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(Affiliated to Bharathidasan University, Trichy - 24)

Attainment of program outcomes and course outcomes

Course Outcome-Programme Outcome Mapping

ACADEMIC YEAR : 2019 - 2020
Department of TAMIL

PROGRAM OUTCOME

PO1	தமிழ் இலக்கியங்களின் இயல்புகளை பல்வேறு படைப்புகளின் வாயிலாக வெளிப்படுத்தி மாணவர்கள் மனதில் படியும் விதமாக வடிவங்களை (மரபுக் கவிதை, புதுக்கவிதை, சிறுகதை, கட்டுரை) போன்றவற்றை அறிமுகம் செய்து வாசிக்க வைக்க முடிகிறது மாணவர்கள் சமூக தனிமனித ஒழுக்கங்களை மேம்படுத்த இலக்கியங்கள் பயன்படுவதை காணமுடிகிறது இலக்கியங்கள் எளிமை, சுருக்கம், உத்தி போன்றவை மூலமாக அறியும் ஆவலை மேம்படுத்துதல், நாட்டுப்புற பண்பாட்டினை மாணவர்களுக்கு தெரியப்படுத்துதல், தமிழ் இலக்கியத்தின் மீதான ஆர்வத்தைத் தூண்டுதல், சுயசிந்தனைக்கு மாணவர்களைப் பழக்குதல்
PO2	இடைக்காலத்து இலக்கிய வகைகளின் மூலம் வரலாறு பண்பாட்டு மாற்றங்கள் பக்தி நிலை, மொழி நிலை மாற்றத்தை சைவ, வைணவ இலக்கியங்கள் தோன்றி சமூகத்தில் சமயம் சார்ந்த கோட்பாடுகள், வரலாறுகள், வரையறைகள், குறித்து சுழுவதோடு அனைத்து சமங்களும் அன்பையே வலியுறுத்துகின்றன என்பதை மாணவர்களிடையே புரியவைத்தல் சிற்றிலக்கியத்தின் தோற்றம் வரையறை -
PO3	புராண இதிகாசங்களை எளிய முறையில் தொடர்நிலை செய்யுள் வடிவத்தில் படைப்பட்டதால் காப்பிய இலக்கியம் சிறப்படைத்ததாகிற்று அறம், பொருள், இன்பம், வீடு ஆகிய உறுதிப் பொருட்கள் மட்டுமே வாழ்வின் முழுமைக்கு முதன்மையானதாக உள்ளதையும் அதனை பின்பற்ற காப்பிய மாந்தர்களின் வாழ்வியலை மாணவர்கள் அறியும் நோக்கோடு காப்பியம் இலக்கியம் கற்பிக்கப்படுகிறது
PO4	சங்க கால இலக்கியங்களை பெற்றால இலக்கியங்கள் என்று பிரிந்ததன் காரணம் அறியப்படுகிறது ஒருவனுக்கு ஒருத்தி என்னும் பண்பாட்டைக் கொண்ட தமிழ் சமூகம் அன்பு புன்னை வாழ்வியலை கொண்டுள்ளது ஒழுக்கத்தை ஒன்றாகவும், வாழ்வியலை இரண்டாகவும், காலத்தை மூன்றாகவும், நிலத்தை நான்காகவும், திணையை ஐந்தாகவும், பொழுதை ஆறாகவும் கொண்டு வாழ்வியலை அமைத்த சங்க புலவரின் நிலைபாடு இக்காலத்தின் சூழலோடு இயைந்து வருவதை அகப்புற இலக்கியத்தின் வாயிலாக அறிதல்
PO5	சங்க கால இலக்கியத்திற்கு பின் தோன்றி அற இலக்கியங்களான பதினெண் கீழ்கணக்கு நூல்கள் மனித வாழ்விற்கு தேவையான அறங்களை கூறி அதன் பயனையும் கூறுகின்றது செய்யுள் வரையறை புதுக்கவிதை காலம் காட்டும் கண்ணாடி, சிறுகதை கதை சொல்லி விளங்க வைத்தல், உரைநடை எழுத்தாற்றலை அதிகப்படுத்துதல், புதினம் காலம் தோறும் ஏற்படும் மாற்றத்தை உணர்ச் செய்தல், நாடகம் முத்தமிழின் வடிவாக திகழ்தல் உள்ளிட்ட அலகுகளின் தோற்றம் வளர்ச்சி பற்றி கூறுதல்

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COURSE OUTCOME

Course Name: இக்கால இலக்கியம் **Course Code: 16LCT1**

CO1	பாரதியார் பாடல்களில் செந்தமிழ் நாடு, புதுமைப்பெண் பாடல்கள் - பாரதிதாசன் பாடல்களில் அழகு, தமிழுனுக்கு வீழ்ச்சியில்லை பாடல்கள் - கவிமணியின் பாடல்களில் சுகாதாரக்கும்மி, தொழிலாளியின் முறையீடு பாடல்கள் - சுரதாவின் பாடல்களில் கல்பனை, போலி உடுப்பு பாடல்கள்
CO2	நாமக்கல் கவிஞரின் தமிழ் வாழ்க, தருணம் இதுவே பாடல்கள் - கவி கா.மு ஷெரிபின் தமிழே, நிலவே சொல், அரிய முயல் பாடல்கள் - கண்ணதாசனின் அனுபவம், நட்பு பாடல்கள் - வாணிதாசனின் வாழ்க இளம்பரிதி, உயிர் வாட்டும் காலம் பாடல்கள்
CO3	நாட்டுப்புறப் பாடல்களில் தாலாட்டு, ஒப்பாரிப் பாடல்கள் - புதுக்கவிதையில் கவிஞர் அப்துல் ரகுமான், முதல் வைரமுத்து வரையிலான பத்து கவிஞர்களின் கவிதைகள் - ஹைக்கூ கவிதைகளில் கவிஞர் அமுதபாரதி முதல் தமிழ் நெஞ்சன் வரையிலான பத்து கவிஞர்களின் கவிதைகள்
CO4	சிறுகதை - ஐவண்ணம் (தேர்ந்தெடுக்கப்பட்ட சிறுகதைகள்) உரைநடை - சிந்தனைச் சுடர் (பேரா. பி. விருத்தாசலம்)
CO5	இலக்கிய வரலாறு 1. மரபுக்கவிதை, 2. புதுக்கவிதை, 3. உரைநடை, 4. சிறுகதை மனப்பாடப்பகுதி 1. பாரதியார் கவிதைகள், 2. பாரதிதாசன் கவிதைகள்

COURSE OUTCOME

Course Name: இடைக்கால இலக்கியமும் புதினமும் **Course Code: 16LCT2**

CO1	பன்னிரு திருமறைகள் 1. திருநாவுக்கரசர் தேவாரம், 2. சுந்தரர் தேவாரம், 3. மாணிக்கவாசகர் திருவாசகம், 4. திருமூலர் திருமந்திரம்
CO2	நாலாயிர திவ்வியப் பிரபந்தம் - 1. பெரியாழ்வார் திருமொழி, 2 தொண்டரடிப்பொடியாழ்வார் திருமாலை, 3. திருப்பாணாழ்வார் அமலன் ஆதிபிரான், 4. மதுரகவியாழ்வார் கண்ணிநுண் சிறுத்தாம்பு
CO3	சிற்றிலக்கியங்கள் - 1. முத்துக்குமார சுவாமி பிள்ளைத்தமிழ், 2. நந்திக்கலம்பகம், 3. தமிழ்விடுதூது 4. குற்றாலக் குறவஞ்சி, 5. கலிங்கத்துப் பரணி, 6. தனிப்பாடல்கள்
CO4	புதினம் - அந்தக்கரை ஓரம் ஆசிரியர் வெ.இறையன்பு, இ.ஆ.ப.
CO5	தமிழ் இலக்கிய வரலாறு மொழி விளக்கம் - மொழிக் குடும்பங்கள் - உலக செம்மொழிகள் - இந்திய செம்மொழிகள் - செம்மொழித் தகுதிகள் - வரையறைகள் - தமிழின் தொன்மை - அறப்போராட்டங்கள் - தமிழ் அமைப்புகள் - நிறுவனங்கள்

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COURSE OUTCOME

Course Name: காப்பியமும் நாடகமும் **Course Code: 16LCT3**

CO1	தமிழில் தோன்றிய முதல் காப்பியம் சிலப்பதிகாரம் - 30 காதைகளைக் கொண்டது பாடத்திட்டத்தில் அடைக்கலக் காதையில் அடைக்கலப் பொருளின் சிறப்பு கொற்றியடிகள் கண்ணகியை அடைக்கலமாக மாதரிடம் கொடுத்தல் - மணிமேகலை இட்டகாப்பியத்தில் ஒன்று அட்சயப் பாத்திரம் பொற்ற மணிமேகலை சிறைக் கோட்டத்தை அற்கோட்டமாக மாற்றுதல் - சீவகசிந்தாமணி ஐம்பெரும் காப்பியங்களுள் மணநூல், சீவகன் எட்டு பெண்களை மணம் புரிதல், விமலையார் இலம்பகம் தாய் விசையையும் சீவகனும் சந்தித்தல்
CO2	தமிழில் அமைந்த இருபெரும் இதிகாசத்தில் ஒன்று கம்பராமாயணம், இராமனின் பிறப்பு முதல் கூறும் இந்நூலில் குகப்படலம் குகனின் தோற்றம், பரதனின் சிறப்பு பற்றி அறிதல் - வில்லி புத்துராழ்வர் இயற்றிய வில்லி பாரதத்தில் அமைந்த உலூகன் தூது சருக்கத்தில் உலூக முனிவன் துரியோதனனிடம் பாண்டவர்களுக்காக தூது செல்லுதல்
CO3	சேக்கிழார் பெருமான் இயற்றிய பெரிய புராணம் அறுபத்து மூன்று நாயன்மார்கள் ஒன்பது தொகை அடியார்கள் வாழ்க்கை வரலாறைக் கூறுகின்றது இதில் திருநாளைப்போவர் நாயனார் புராணத்தில் நந்தனார் இறைவனோடு கலந்த நிகழ்வு கூறப்படுகின்றது முகமதியர்களின் காவியமான சீறாப்புராணம் நபிகள் நாயகத்தின் வாழ்க்கை வரலாறைக் கூறுகின்றது இதில் ஈத்தங்குலை வரலாற்றை படலத்தில் அரபிக்காக நபிகள் ஈத்தங்குலை வரலாற்றைத் கூறப்படுகிறது - கிருத்துவ இலக்கியமான தேம்பாவணி சூசையப்பரின் வாழ்க்கையை கூறுகிறது நீர் வரம் அடைந்த படலத்தில் குழந்தை இயேசுவின் ஆடை நீர் நிலையில் அலைவதால் நீர் புனிதம் அடைந்த தன்மை கூறப்படுதல்
CO4	சாபம்?... விமோசம் நாடகத்தில் சாபம் பெறும் முனிவர் தன் சீடர்களின் வேண்டலை ஏற்காமல் சாப நிலையிலேயே வாழ நினைக்கின்றார் அவரின் சாபமே விமோச்சம் ஆகிறது - புரட்சிக்கவியில் சாமானியன் புரட்சியாளனாக மாறுதல் கூறப்படுகிறது - ஆழ்கிரன் நாடகத்தில் ஆவின் மகனாக பிறந்தவன் உயர்நிலை அடையும் முன் படும்பாடு கூறப்படுகிறது
CO5	தமிழ் இலக்கிய வெளியில் காப்பிய இலக்கிய அமைப்பையும் அதன் அடிப்படையில் காப்பியங்கள், புராண இதிகாசங்கள், நாடக இலக்கிய அமைப்பு, சிற்றிலக்கியங்களின் வகைகள் அதன் தோற்றம், வளர்ச்சியைப் பற்றி எடுத்துரைத்தல்

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COURSE OUTCOME

Course Name: பண்டைய இலக்கியம் **Course Code: 16LCT4**

CO1	எட்டுத்தொகை நூல்களுள் ஒன்று குறுந்தொகை, 401 பாடல்களைக் கொண்டது. அகம் சார்ந்த பாடல்களில் பா.எ07, 23, 38, 222, 396 உள்ளிட்ட பாடல்களின் பொருள் சிறப்பு துறை பற்றிய செய்திகள் அறியப்பட்டது - நல் திணை எட்டுடும் நற்றிணையின் பாடல் அடிகள் திணைபற்றிய செய்திகளோடு பாடல் எண் 01, 120 ஆகிய பாடல்களின் செய்திகள் கூறுதல் சங்க [illegible]
CO2	கற்றறிந்தார் ஏத்தும் கலியில் (கலித்தொகை) குறிஞ்சிக் கலி (சுடர்த்தொடீஇ பாடல்) நெய்தல் கலி (மாமலர் பாடல்) உள்ளிட்டப் பாடல்களில் திணை சார்ந்த செய்திகள் அறிதல் - பத்துப்பாட்டில் நல்லூர் நத்தத்தனார், ஓய்மா நாட்டு நல்லியக்கோடன் மீது இயற்றிய சிறுபாணாற்றுப்படையில் ஐந்து நில வர்ணனை, கடையெழு வள்ளல்கள், பாணன் விறலியின் நிலை கூறி ஆற்றுப்படுத்துதல்
CO3	அகம் எனும் பெயர் கொண்ட அகநானூற்றில் அகத்துறை பாடல், நோகோ யானே எனத்தொடங்கும் பாடலும் முப்பொருள் விளக்கமாக அமைந்திருப்பதைக் காணுதல் - புறம் எனும் புறநானூற்றில் பாடல்எண் 47, 163, 182, 204, 217 உள்ளிட்டவைகளில் அமைந்த புறம் சார்ந்த செய்திகளைக் காணுதல்
CO4	பதினெண் கீழ்க்கணக்கு நூல்களில் ஒன்றான திருக்குறளில் புறங்கூறாமை, மானம், நெஞ்சொடு கிளத்தல் உள்ளிட்ட அதிகாரங்களை கற்றல் - நாலடியாரில் அரும்பெறல், கல்லாது போகிய கோட்டுப்பூ போல, நல்லிலைக்கண், ஒருநன்றி எனத்தொடங்கும் பாடல்களின் கருத்துக்களை அறிதல் - பழமொழி நானூறில் புலமிக்கவரை, முள்ளைக்கு புத்தாலும், செயல்வேண்டா, நாறுமரென்று எனத் தொடங்கும் பழமொழிகள் அமைந்தப் பாடல்களை கூறுதல்
CO5	சங்க இலக்கியம் - பத்துப்பாட்டு - எட்டுத்தொகை - பதினெண் கீழ்க்கணக்கு நூல்கள் - மனிதநேயம், வாழ்வியல் அறங்கள், மொழி உணர்ச்சி, அறிவியல் வளர்ச்சி உள்ளிட்ட தலைப்புகளில் அமைந்த பொதுக்கட்டுரைகள்

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(Affiliated to Bharathidasan University, Trichy - 24)

Attainment of program outcomes and course outcomes

Course Outcome-Programme Outcome Mapping

ACADEMIC YEAR : 2020 - 2021
Department of TAMIL

PROGRAM OUTCOME

PO1	தமிழ் இலக்கியங்களின் இயல்புகளை பல்வேறு படைப்புகளின் வாயிலாக வெளிப்படுத்தி மாணவர்கள் மனதில் பதியும் விதமாக வடிவங்களை (மரபுக் கவிதை, புதுக்கவிதை, சிறுகதை, உரைநடை) போன்றவற்றை அறிமுகம் செய்து வாசிக்க வைக்க முடிகிறது மாணவர்கள் சமூக தனிமனித ஒழுக்கங்களை மேம்படுத்த இலக்கியங்கள் பயன்படுவதை காணமுடிகிறது இலக்கியங்கள் எளிமை, சுருக்கம், உத்தி போன்றவை மூலமாக அறியும் ஆவலை மேம்படுத்துதல், நாட்டுப்புறப் பண்பாட்டினை மாணவர்களுக்கு தெரியப்படுத்துதல், தமிழ் இலக்கியத்தின் மீதான ஆர்வத்தைத் தூண்டுதல், சுயவாசிப்புக்கு மாணவர்களைப் பழக்குதல்
PO2	இடைக்காலத்து இலக்கிய வகையின் மூலம் வரலாறு பண்பாட்டு மாற்றங்கள் பக்தி நிலை, மொழி நிலை, மாற்றத்தை சைவ, வைணவ இலக்கியங்கள் தோன்றி சமூகத்தில் சமயம் சார்ந்த போராட்டங்கள், வரலாறுகள், வரையறைகள், குறித்து கருவோடு அனைத்து சமயங்களும் அன்பையே வலியுறுத்துகின்றன என்பதை மாணவர்களிடையே புரியவைத்தல்- சிற்றிலக்கியத்தின் தோற்றம் வரையறை -
PO3	புராண இதிகாசங்களை எளிய முறையில் தொடர்நிலைச் செய்யுள் வடிவத்தில் பாடப்பட்டதால் காப்பிய இலக்கியம் சிறப்படைந்துள்ளது அறம், பொருள், இன்பம், வீடு ஆகிய உறுதிப் பொருள்கள் மட்டுமே வாழ்வின் முழுமைக்கு முதன்மையானதாக உள்ளதையும் அதனை பின்பற்ற காப்பிய பாத்திரங்களின் வாழ்வியலை மாணவர்கள் அறியும் நோக்கோடு காப்பியம் இலக்கியம் கற்பிக்கிறது
PO4	சங்க கால இலக்கியங்களை பொற்கால இலக்கியங்கள் என்று போற்றுவதன் காரணம் அறியப்படுகிறது ஒருவனுக்கு ஒருத்தி என்னும் பண்பாட்டைக் கொண்ட தமிழ் சமூகம் அகம் புறம் என வாழ்வியலை கொண்டுள்ளது ஒழுக்கத்தை ஒன்றாகவும், வாழ்வியலை இரண்டாகவும், காலத்தை மூன்றாகவும், நிலத்தை நான்காகவும், திணையை ஐந்தாகவும், பொழுதை ஆறாகவும் கொண்டு வாழ்வியலை அமைத்த சங்க புலவரின் நிலைபாடு இக்காலத்தின் சூழலோடு இயைந்து வருவதை அகப்புற இலக்கியத்தின் வாயிலாக அறிதல்
PO5	சங்க கால இலக்கியத்திற்கு பின் தோன்றி அற இலக்கியங்களான பதினெண் கீழ்க்கணக்கு நூல்கள் மனித வாழ்விற்கு தேவையான அறங்களை கூறி அதன் பயனையும் கூறுகின்றது. செம்மொழி வரையறை புதுக்கவிதை காலம் காட்டும் கண்ணாடி, சிறுகதை கதை செல்வி விளங்க வைத்தல், உரைநடை எழுத்தாற்றலை அறிமுகப்படுத்துதல், புதினம் காலம் தோறும் ஏற்படும் மாற்றத்தை உணரச் செய்தல், நாடகம் முத்தமிழின் வடிவமாக திகழ்தல் உள்ளிட்ட அனைத்தின் தோற்றம் வளர்ச்சி பற்றி கூறுதல்

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COURSE OUTCOME

Course Name: இக்கால இலக்கியம் **Course Code: 16LCT1**

CO1	பாரதியார் பாடல்களில் செந்தமிழ் நாடு, புதுமைப்பெண் பாடல்கள் - பாரதிதாசன் பாடல்களில் அழகு, தமிழுக்கு வீழ்ச்சியில்லை பாடல்கள் - கவிமணியின் பாடல்களில் சகோதரக்கும்மி, தொழிலாளியின் முறையீடு பாடல்கள் - சுரதாவின் பாடல்களில் கலப்பை, போலி உடும்பு பாடல்கள்
CO2	நாமக்கல் கவிஞரின் தமிழ் வாழ்க, தருணம் இதுவே பாடல்கள் - கவி கா.மு. ஷெரீபின் தமிழே, நிலவே சொல், அரிய முயல் பாடல்கள் - கண்ணதாசனின் அனுபவம், நட்பு பாடல்கள் - வாணிதாசனின் வாழ்க இளம்பரிதி, உயிர் வாட்டும் காலம் பாடல்கள்
CO3	நாட்டுப்புறப் பாடல்களில் தாலாட்டு, ஒப்பாரிப் பாடல்கள் - புதுக்கவிதையில் கவிஞர் அப்துல் ரகுமான் முதல் வைரமுத்து வரையிலான பத்து கவிஞர்களின் கவிதைகள் - ஹைக்கூ கவிதைகளில் கவிஞர் அமுதபாரதி முதல் தமிழ் நெஞ்சன் வரையிலான பத்து கவிஞர்களின் கவிதைகள்
CO4	சிறுகதை - லைவண்ணம் (தேர்ந்தெடுக்கப்பட்ட சிறுகதைகள்) உரைநடை - சிந்தனைச் சுடர் (பேரா. பி. விருத்தாசலம்)
CO5	இலக்கிய வரலாறு 1. மரபுக்கவிதை, 2. புதுக்கவிதை, 3. உரைநடை, 4. சிறுகதை மனப்பாடப்பகுதி 1. பாரதியார் கவிதைகள், 2. பாரதிதாசன் கவிதைகள்

COURSE OUTCOME

Course Name: இடைக்கால இலக்கியமும் புதினமும் **Course Code: 16LCT2**

CO1	பன்னிரு திருமுறைகள் 1. திருநாவுக்கரசர் தேவாரம், 2. சுந்தரர் தேவாரம், 3. மாணிக்கவாசகர் திருவாசகம், 4. திருமூலர் திருமந்திரம்
CO2	நாலாயிர திவ்வியப் பிரபந்தம் - 1. பெரியாழ்வார் திருமொழி, 2 தொண்டரடிப்பொடியாழ்வார் திருமாலை, 3. திருப்பாணாழ்வார் அமலன் ஆதிபிரான், 4. மதுரகவியாழ்வார் கண்ணிநுண் சிறுத்தாம்பு
CO3	சிற்றிலக்கியங்கள் - 1. முத்துக்குமார சுவாமி பிள்ளைத்தமிழ், 2. நந்திக்கலம்பகம், 3. தமிழ்விடுதூது, 4. குற்றாலக் குறவஞ்சி, 5. கலிங்கத்துப் பரணி, 6. தனிப்பாடல்கள்
CO4	புதினம் - ஆற்றங்கரை ஓரம் ஆசிரியர் வெ.இறையன்பு இ.ஆ.ப
CO5	தமிழ் இலக்கிய வரலாறு மொழி விளக்கம் - மொழிக் குடும்பங்கள் - உலக செம்மொழிகள் - இந்திய செம்மொழிகள் - செம்மொழித் தகுதிகள் - வரையறைகள் - தமிழின் தொன்மை - அறப்போராட்டங்கள் - தமிழ் அமைப்புகள் - நிறுவனங்கள்

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COURSE OUTCOME

Course Name: காப்பியமும் நாடகமும் **Course Code: 16LCT3**

CO1	தமிழில் தோன்றிய முதல் காப்பியம் சிலப்பதிகாரம் - 30 காதைகளைக் கொண்டது பாடத்திட்டத்தில் அடைக்கலக் காதையில் அடைக்கலப் பொருளின் சிறப்பு கொந்தியடிகள் கண்ணகியை அடைக்கலமாக மாதரியிடம் கொடுத்தல் - மணிமேகலை இட்டகாப்பியத்தில் ஒன்று அட்சய பாத்திரம் பொற்ற மணிமேகலை சிறைக் கோட்டத்தை அறக்கோட்டமாக மாற்றுதல் - சீவகசிந்தாமணி ஐம்பெரும் காப்பியங்களுள் மணநூல் சீவகன் எட்டு பெண்களை மணம் புரிதல், விமலையார் இவ்வுலகம் தாய் விளையையும் சீவகனும் சந்தித்தல்
CO2	தமிழில் அமைந்த இருபெரும் இதிகாசத்தில் ஒன்று கம்பராமாயணம், இராமனின் பிறப்பு முதல் சுமும் இந்நூலில் குகப்படலம் குகனின் தோற்றம், பரதனின் சிறப்பு பற்றி அறிதல் - வில்லி புத்தூராழ்வார் இயற்றிய வில்லி பாரதத்தில் அமைந்த உலூகன் தூது சருக்கத்தில் உலூக முனிவன் தருமோதனனிடம் பாண்டவர்களுக்காக தூது செல்லுதல்
CO3	சேக்கிழார் பெருமான் இயற்றிய பெரிய புராணம் அறுபத்து மூன்று நாயன்மார்கள் ஒன்பது தொகை அடியார்கள் வாழ்க்கை வரலாறைக் கூறுகின்றது இதில் திருநாளைப்போவார் நாயனார் புராணத்தில் நந்தனார் இறைவனோடு கலந்த நிகழ்வு கூறப்படுகின்றது முடுமதியார்களின் காவியமான சீறாப்புராணம் நபிகள் நாயகத்தின் வாழ்க்கை வரலாறைக் கூறுகின்றது இதில் ஈத்தங்குலை வரவழைத்த படலத்தில் அபிக்காக நபிகள் ஈத்தங்குலை வரவழைத்தல் கூறப்படுகிறது - கிருத்துவ இலக்கியமான தேம்பாவணி சூசையப்பரின் வாழ்க்கையை கூறுகிறது நீர் வரம் அடைந்த படலத்தில் குழந்தை இயேசுவின் அடை நீர் நிலையில் அலசியதால் நீர் புனிதம் அடைந்த தன்மை கூறப்படுதல்
CO4	சாம்?.. விமோசம் நாடகத்தில் சாம் பெரும் முனிவர் தன் சீடர்களின் வேண்டலை ஏற்காமல் சாப நிலையிலேயே வாழ நினைக்கின்றார் அவரின் சாபமே விமோச்சம் ஆகிறது - புரட்சிக்கவியில் சாமானியன் புரட்சியாளனாக மாறுதல் கூறப்படுகிறது - ஆத்திரன் நாடகத்தில் ஆவின் மகனாக பிறந்தவன் உயர்நிலை அடையும் முன் படும்பாடு கூறப்படுகிறது
CO5	தமிழ் இலக்கிய வெளியில் காப்பிய இலக்கிய அமைப்பையும் அதன் அடிப்படையில் காப்பியங்கள், புராண இதிகாசங்கள், நாடக இலக்கிய அமைப்பு, சிற்றிலக்கியங்களின் வகைகள் அதன் தோற்றம், வளர்ச்சியைப் பற்றி எடுத்துரைத்தல்

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COURSE OUTCOME

Course Name: பண்டைய இலக்கியம் **Course Code:** 16LCT4

CO1	எட்டுத்தொகை நூல்களுள் ஒன்று குறுந்தொகை. 401 பாடல்களைக் கொண்டது அகம் சார்ந்த பாடல்களில் பா.எ.07, 23, 38, 222, 396 உள்ளிட்ட பாடல்களின் பொருள் சிறப்பு துறை பற்றிய செய்திகள் அறியப்பட்டது - நல் திணை எட்டுடுமே நற்றிணையின் பாடல் அதுகள் திணைபற்றிய செய்திகளோடு பாடல் எண் 01, 120 ஆகிய பாடல்களின் செய்திகள் கூறுதல் சங்க [illegible]
CO2	கற்றறிந்தார் ஏத்தும் கலியில் (கலித்தொகை) குறிஞ்சிக் கலி (கபிலர் 8 பாடல்) நெய்தற் கலி (மாமலர் பாடல்) உள்ளிட்டப் பாடல்களில் திணை சார்ந்த செய்திகள் அறிதல் - பத்துப்பாட்டில் நல்லூர் நத்தத்தனார், ஓய்மா நாட்டு நல்லியக்கோடன் மீது இயற்றிய சிறுபாணாற்றுப்படையில் ஐந்து நில வளமை, கடையெழு வள்ளல்கள், பாணன் வறுமையின் நிலை கூறி ஆற்றுப்படுத்துதல்
CO3	அகம் எனும் பெயர் கொண்ட அகநானூற்றில் அகல்அறை பாடல், நோகோ யானே தொடங்கும் பாடலும் முப்பொருள் விளக்குவதாக அமைந்திருப்பதைக் காணுதல் - புறம் எனும் புறநானூற்றில் பாடல்எண் 47, 163, 182, 204, 217 உள்ளிட்டவைகளில் அமைந்த புறம் சார்ந்த செய்திகளைக் காணுதல்
CO4	பதினெண் கீழ்க்கணக்கு நூல்களில் ஒன்றான திருக்குறளில் புறங்கூறாமை, மானம், நெஞ்சொடு கிளத்தல் உள்ளிட்ட அதிகாரங்களை கற்றல் - நாலடியாரில் அரும்பெறல், கல்லாதபோகிய கோட்டுப்பூ போல, நன்னிலைக்கண், ஒருநன்றி எனத்தொடங்கும் பாடல்களின் கருத்துக்களை அறிதல் - பழமொழி நானூறில் புலவீக்கவரை, முல்லைக்கு பூந்தாலும், செயல்வேண்டா, நாடியவரென்று எனத் தொடங்கும் பழமொழிகள் அமைந்தப் பாடல்களை கூறுதல்
CO5	சங்க இலக்கியம் - பத்துப்பாட்டு - எட்டுத்தொகை - பதினெண் கீழ்க்கணக்கு நூல்கள் - மனிதநேயம், வாழ்வியல் அறங்கள், மொழி உணர்ச்சி, அறிவியல் வளர்ச்சி உள்ளிட்ட தலைப்புகளில் அமைந்த பொதுக்கட்டுரைகள்

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(UGC Recognized 2(f) and 12(B) Institution)

(Affiliated to Bharathidasan University, Trichy - 24)

Attainment of program outcomes and course outcomes

Course Outcome-Programme Outcome Mapping

ACADEMIC YEAR : 2021 - 2022
Department of TAMIL

PROGRAM OUTCOME

PO1	தமிழ் இலக்கியங்களின் இயல்புகளை பல்வேறு படைப்புகளின் வாயிலாக வெளிப்படுத்தி மாணவர்கள் மனதில் பதியும் விதமாக வடிவங்களை (மரபுக் கவிதை, புதுக்கவிதை, சிறுகதை, கட்டுரை) போன்றவற்றை அறிமுகம் செய்து வாசிக்க வைக்க முடிகிறது மாணவர்கள் சமூக தனிமனித ஒழுக்கங்களை மேம்படுத்த இலக்கியங்கள் பயன்படுவதை காணமுடிகிறது இலக்கியங்கள் வரிசை, சுருக்கம், உத்தி போன்றவை மூலமாக அறியும் ஆவலை மேம்படுத்துதல், நாட்டுப்புறப் பண்பாட்டினை மாணவர்களுக்கு தெரியப்படுத்துதல், தமிழ் இலக்கியத்தின் மீதான ஆர்வத்தைத் தூண்டுதல், சுயவாசிப்புக்கு மாணவர்களைப் பழக்குதல்
PO2	இடைக்காலத்து இலக்கிய வகையின் மூலம் வரலாறு பண்பாட்டு மாற்றங்கள் பக்தி நிலை, மொழி நிலை, மாற்றத்தை சைவ, வைணவ இலக்கியங்கள் தோன்றி சமூகத்தில் சமயம் சார்ந்த கோட்பாடுகள், வரலாறுகள், வரைமுறைகள், குறித்து கூறுவதோடு அனைத்து சமயங்களும் அன்பையே வலியுறுத்துகின்றன என்பதை மாணவர்களிடையே புரியவைத்தல் சிற்றிலக்கியத்தின் தோற்ற வரைமுறை -
PO3	புராண இதிகாசங்களை பெரிய முறையில் தொடர்நிலைச் செய்யுள் வடிவத்தில் பாடப்பட்டதால் காப்பிய இலக்கியம் சிறப்புடைத்தாயிற்று அறம், பொருள், இன்பம், வீடு ஆகிய உறுதிப் பொருட்கள் பற்றிய வாழ்வின் முழுமைக்கு முதன்மையானதாக உள்ளதையும் அதனை பின்பற்ற காப்பிய மாந்தர்களின் வாழ்வியலை மாணவர்கள் அறியும் நோக்கோடு காப்பியம் இலக்கியம் கற்பிக்கிறது
PO4	சங்க கால இலக்கியங்களை பொற்கால இலக்கியங்கள் என்று போற்றுவதன் காரணம் அறியப்படுகிறது ஒருவனுக்கு ஒருத்தி என்னும் பண்பாட்டைக் கொண்ட தமிழ் சமூகம் அகம் புறம் என வாழ்வியலை கொண்டுள்ளது ஒழுக்கத்தை ஒன்றாகவும், வாழ்வியலை இரண்டாகவும், காலத்தை மூன்றாகவும், நிலத்தை நான்காகவும், திணையை ஐந்தாகவும் பொழுதை ஆறாகவும் கொண்டு வாழ்வியலை அமைத்த சங்க புலவரின் நிலையோடு இக்காலத்தின் சூழலோடு இயைந்து வருவதை, அகப்புற இலக்கியத்தின் வாயிலாக அறிதல்
PO5	சங்க கால இலக்கியத்திற்கு பின் தோன்றி அற இலக்கியங்களான பதினென் கீழ்க்கணக்கு நூல்கள் மனித வாழ்விற்கு தேவையான அறங்களை கூறி அதன் பயனையும் கூறுகின்றது செம்மொழி வரையறை புதுக்கவிதை காலம் காட்டும் கண்ணாடி, சிறுகதை கதை செல்வி விளங்க வைத்தல், உரைநடை வளர்ச்சியினை அறியப்படுத்துதல், புதினம் காலம் தோறும் ஏற்படும் மாற்றத்தை உணரச் செய்தல், நாடகம் முத்தமிழின் வடிவமாக திகழ்தல் உள்ளிட்ட அனைத்தின் தோற்றம் வளர்ச்சி பற்றி கூறுதல்

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COURSE OUTCOME

Course Name: இக்கால இலக்கியம் **Course Code: 16LCT1**

CO1	பாரதியார் பாடல்களில் செந்தமிழ் நாடு, புதுமைப்பெண் பாடல்கள் - பாரதிதாசன் பாடல்களில் அழகு, தமிழுக்கு வீழ்ச்சியில்லை பாடல்கள் - கவிமணியின் பாடல்களில் சுகாதாரக்கும்மி, தொழிலாளியின் முறையீடு பாடல்கள் - சுரதாவின் பாடல்களில் கப்பல், போலி உடும்பு பாடல்கள்
CO2	நாமக்கல் கவிஞரின் தமிழ் வாழ்க, தருணம் இதுவே பாடல்கள் - கவி கா.மு. ஷெரீபின் தமிழே, நிலவே சொல், அரிய முயல் பாடல்கள் - கண்ணதாசனின் அனுபவம், நட்பு பாடல்கள் - வாணிதாசனின் வாழ்க இளம்பரிதி, உயிர் வாட்டும் காலம் பாடல்கள்
CO3	நாட்டுப்புறப் பாடல்களில் தாலாட்டு, ஒப்பாரிப் பாடல்கள் - புதுக்கவிதையில் கவிஞர் அப்துல் ரகுமான், முதல் வைரமுத்து வரையிலான பத்து கவிஞர்களின் கவிதைகள் - ஹைக்கூ கவிதைகளில் கவிஞர் அமுதபாரதி முதல் தமிழ் நெஞ்சன் வரையிலான பத்து கவிஞர்களின் கவிதைகள்
CO4	சிறுகதை - வைவண்ணம் (தேர்ந்தெடுக்கப்பட்ட சிறுகதைகள்) உரைநடை - சிந்தனைச் சுடர் (பேரா. பி. விருத்தாசலம்)
CO5	இலக்கிய வரலாறு 1. மரபுக்கவிதை, 2. புதுக்கவிதை, 3. உரைநடை, 4. சிறுகதை மனப்பாடப்பகுதி 1. பாரதியார் கவிதைகள், 2. பாரதிதாசன் கவிதைகள்

COURSE OUTCOME

Course Name: இடைக்கால இலக்கியமும் புதினமும் **Course Code: 16LCT2**

CO1	பன்னிரு திருமுறைகள் 1. திருநாவுக்கரசர் தேவாரம், 2. சுந்தரர் தேவாரம், 3. மாணிக்கவாசகர் திருவாசகம், 4. திருமூலர் திருமந்திரம்
CO2	நாலாயிர திவ்வியப் பிரபந்தம் - 1. பெரியாழ்வார் திருமொழி, 2. தொண்டரடிப்பொடியாழ்வார் திருமாலை, 3. திருப்பாணாழ்வார் அமலன் ஆதிபிரான், 4. மதுரகவியாழ்வார் கண்ணிநுண் சிறுத்தாம்பு
CO3	சிற்றிலக்கியங்கள் - 1. முத்துக்குமார சுவாமி பிள்ளைத்தமிழ், 2. நந்திக்கலம்பகம், 3. தமிழ்விடுதூது, 4. குற்றாலக் குறவஞ்சி, 5. கலிங்கத்துப் பரணி, 6. தனிப்பாடல்கள்
CO4	புதினம் - ஆற்றங்கரை ஓரம் ஆசிரியர் வெ.இறையன்பு இ.ஆ.ப.
CO5	தமிழ் இலக்கிய வரலாறு மொழி விளக்கம் - மொழிக் குடும்பங்கள் - உலக செம்மொழிகள் - இந்திய செம்மொழிகள் - செம்மொழித் தகுதிகள் - வரையறைகள் - தமிழின் தொன்மை - அறப்போராட்டங்கள் - தமிழ் அமைப்புகள் - நிறுவனங்கள்

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COURSE OUTCOME

Course Name: காப்பியமும் நாடகமும் **Course Code: 16LCT3**

CO1	தமிழில் தோன்றிய முதல் காப்பியம் சிலப்பதிகாரம் - 30 காதைகளைக் கொண்டது பாடத்திட்டத்தில் அடைக்கலக் காதையில் அடைக்கலப் பொருளின் சிறப்பு, கொற்றியடிகள் கண்ணகியை அடைக்கலமாக மாதரிடம் கொடுத்தல் - மணிமேகலை இட்டகாப்பியத்தில் ஒன்று, அட்சயப் பாத்திரம் பெற்ற மணிமேகலை சிறைக் கோட்டத்தை அறக்கோட்டமாக மாற்றுதல் - சீவகசிந்தாமணி ஐம்பெரும் காப்பியங்களுள் மணநூல், சீவகன் எட்டு பெண்களை மணம் புரிதல், விமலையார் இலம்பகம் தாய் விசையையும் சீவகனும் சந்தித்தல்
CO2	தமிழில் அமைந்த இருபெரும் இதிகாசத்தில் ஒன்று கம்பராமாயணம், இராமனின் பிறப்பு முதல் சுமும் இந்நூலில் குகப்படலம் குகனின் தோற்றம், பரதனின் சிறப்பு பற்றி அறிதல் - வில்லி புத்தூராழ்வர் இயற்றிய வில்லி பாரதத்தில் அமைந்த உலூகன் தூது சருக்கத்தில் உலூக முனிவன் தரியோதனனிடம் பாண்டவர்களுக்காக தூது செல்லுதல்
CO3	சேக்கிழார் பெருமான் இயற்றிய பெரிய புராணம் அறுபத்து மூன்று நாயன்மார்கள் ஒன்பது தொகை அடியார்கள் வாழ்க்கை வரலாறைக் கூறுகின்றது இதில் திருநாளைப்போவார் நாயனார் புராணத்தில் நந்தனார் இறைவனோடு கலந்த நிகழ்வு சுறப்படுகின்றது முகமதியர்களின் காவியமான சீறாப்புராணம் நபிகள் நாயகத்தின் வாழ்க்கை வரலாறைக் கூறுகின்றது, இதில் ஈத்தங்குலை வரவழைத்த படலத்தில் அரபிக்காக நபிகள் ஈத்தங்குலை வரவழைத்தல் சுறப்படுகிறது - கிருத்துவ இலக்கியமான தேம்பாவணி சூசையப்பரின் வாழ்க்கையை கூறுகிறது, நீர் வரம் அடைந்த படலத்தில் குழந்தை இயேசுவின் ஆடை நீர் நிலையில் அலசியதால் நீர் புனிதம் அடைந்த தன்மை சுறப்படுதல்
CO4	சாபம்?... விமோசம் நாடகத்தில் சாபம் பெறும் முனிவர் தன் சீடர்களின் வேண்டலை ஏற்காமல் சாப நிலையிலேயே வாழ நினைக்கின்றார் அவரின் சாபமே விமோச்சம் ஆகிறது - புரட்சிக்கவியில் சாமானியன் புரட்சியாளனாக மாறுதல் சுறப்படுகிறது - ஆழ்வார்கள் நாடகத்தில் ஆழின் மகனாக பிறந்தவன் உயர்நிலை அடையும் முன் படும்பாடு சுறப்படுகிறது
CO5	தமிழ் இலக்கிய வெளியில் காப்பிய இலக்கிய அமைப்பையும் அதன் அடிப்படையில் காப்பியங்கள், புராண இதிகாசங்கள், நாடக இலக்கிய அமைப்பு, சிற்றிலக்கியங்களின் வகைகள் அதன் தோற்றம், வளர்ச்சியைப் பற்றி எடுத்துரைத்தல்

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COURSE OUTCOME

Course Name: பண்டைய இலக்கியம் **Course Code: 16LCT4**

CO1	எட்டுத்தொகை நூல்களுள் ஒன்று குறுந்தொகை. 401 பாடல்களைக் கொண்டது. அகம் சார்ந்த பாடல்களில் பா.எ.07, 23, 38, 222, 396 உள்ளிட்ட பாடல்களின் பொருள் சிறப்பு துறை பற்றிய செய்திகள் அறியப்பட்டது - நல் திணை ஐம்பதும் நற்றிணையின் பாடல் அடிகள் திணைப்பற்றிய செய்திகளோடு பாடல் எண் 01, 120 ஆகிய பாடல்களின் செய்திகள் சுருதல் சங்க [illegible]
CO2	கற்றறிந்தார் ஏத்தும் கலியில் (கலித்தொகை) குறிஞ்சிக் கலி (கூற்றொடு இ பாடல்) நெய்தற் கலி (மாமலர் பாடல்) உள்ளிட்டப் பாடல்களில் திணை சார்ந்த செய்திகள் அறிதல் - பத்துப்பாட்டில் நல்லூர் நத்தத்தனார், ஓய்மா நாட்டு நல்லியக்கோடன் மீது இயற்றிய சிறுபாணாற்றுப்படையில் ஐந்து நில வாணரை, கடையெழு வள்ளல்கள், பாணன் விறலியின் நிலை சுரி ஆற்றுப்படுத்துதல்
CO3	அகம் எனும் பெயர் கொண்ட அகநானூற்றில் அகல்முறை பாடல், நோகோ எந்தொடங்கும் பாடலும் முப்பொருள் விளங்குவதாக அமைந்திருப்பதைக் காணுதல் - புறம் எனும் புறநானூற்றில் பாடல்கள் 47, 163, 182, 204, 217 உள்ளிட்டவைகளில் அமைந்த புறம் சார்ந்த செய்திகளைக் காணுதல்
CO4	பதினென் கீழ்க்கணக்கு நூல்களில் ஒன்றான திருக்குறளில் புறங்கூறாமை, மானம், நெஞ்சொடு கிளத்தல் உள்ளிட்ட திகாரங்களை கற்றல் - நாலடியாரில் அரும்பெறல், கல்லாதுபோகியு, கோட்டுப்பூப் போலு, நன்னிலைக்கண், ஒருநன்றி எந்தொடங்கும் பாடல்களின் கருத்துக்களை அறிதல் - பழமொழி நானூறில் புலிக்கவரை, முல்லைக்கு, பூத்தாலும், செய்வேண்டா, நாழநமென்று எந்த தொடங்கும் பழமொழிகள் அமைந்தப் பாடல்களை சுருதல்
CO5	சங்க இலக்கியம் - பத்துப்பாட்டு - எட்டுத்தொகை - பதினென் கீழ்க்கணக்கு நூல்கள் - மனிதநேயம், வாழ்வியல் அறங்கள், மொழி உணர்ச்சி, அறிவியல் வளர்ச்சி உள்ளிட்ட தலைப்புகளில் அமைந்த பொதுக்கட்டுரைகள்

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